ENVIRONMENTAL REGULATION

Air Quality Management

CAIR NO_x Trading Program

Proposed Amendment: N.J.A.C. 7:27A-3.10

Proposed New Rules: N.J.A.C. 7:27-30; 7:27-31.23

Authorized by: Lisa P. Jackson, Commissioner, Department of Environmental

Protection

Authority: N.J.S.A. 13:1B-3(e), 13:1D-9, and 26:2C-1 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar

requirement.

DEP Docket Number: **02-07-01/540**

Proposal Number: PRN 2006-

A **public hearing** concerning this rule proposal, the proposed abbreviated CAIR SIP, and a proposed SIP revision pursuant Section 110(a)(2)(D)(i)(I) of the Federal Clean Air Act, will be held on March 28, 2007 at:

First Floor Hearing Room

Department of Environmental Protection

401 East State Street

Trenton, New Jersey

Submit written comments by [60 days after publication] to:

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Alice A. Previte, Esq.

Attn: DEP Docket No. 02-07-01/540

Department of Environmental Protection

PO Box 402

401 East State Street

Trenton, New Jersey 08625-0402

The Department of Environmental Protection (Department) requests that commenters submit comments on diskette or CD as well as on paper. Submittal of a CD or disk is not a requirement. The Department prefers Microsoft Word 6.0 or above. Macintosh formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

This rule proposal can be viewed or downloaded from the Department's web site at http://www.nj.gov/dep.

The agency proposal follows:

Summary

As the Department has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department is proposing new rules at N.J.A.C. 7:27-30, CAIR NO_x Trading Program. The Federal Clean Air Interstate Rule (CAIR) program, as established in the Federal rules, starts in 2009 for the annual and ozone season oxides of nitrogen (NO_x) control periods,

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rules also constitute proposed revisions to New Jersey's SIP, in accordance with Section

110(a)(2)(D)(i)(I) of the Federal Clean Air Act, 42 U.S.C. §7410.

The Department is also proposing at N.J.A.C. 7:27-31.23 to provide the date when the CAIR NO_x Trading Program (State CAIR Program) will replace the NO_x Budget Program. Because the State CAIR Program will replace the State's NO_x Budget Program beginning with the 2009 control period, it is necessary for the Department to establish this transition date for the NO_x Budget Program to prevent an overlap of ozone season cap and trade programs for NO_x .

Background

The United States Environmental Protection Agency (USEPA) promulgated CAIR on May 12, 2005, to partially address the interstate transport of ozone and fine particulate precursors in the eastern United States. (See 70 Fed. Reg. 25161.) The Federal rule requires emission reductions of sulfur dioxide (SO₂) and oxides of nitrogen (NO_x) because they are precursors to fine particulate matter (PM_{2.5}), and because NO_x is also precursor to ozone. The Federal CAIR

program obtains the reductions from large electric generating units (EGUs), including large cogeneration units, through cap and trade programs over the eastern United States for annual emissions of SO₂, annual emissions of NO_x, and emissions of NO_x during the ozone season. The Federal CAIR program provides states with a budget for NO_x (both annual and ozone season) that would be allocated among units in each state. The units cannot emit more than their allocated portion of the budget, unless the unit purchases additional allowances from the emissions market. An SO₂ budget is not assigned to the states because the USEPA allocates SO₂ allowances directly to the units under the Federal Acid Rain Program (40 CFR Parts 72 through 78). Accordingly, the proposed rules address only NO_x allocation.

A state's NO_x budget is based upon the historical operation of units in the state, plus a portion of the compliance supplemental pool. The compliance supplement pool consists of vintage 2009 NO_x allowances for the annual program equal to 200,000 tons of NO_x emissions for the 28 states in the Federal CAIR program, divided among the states based on the same method as the base CAIR state budgets. (A "vintage year" is the first year in which an allowance can be used — it is not the year in which a source uses it.) The compliance supplement pool can be allocated to CAIR units that either over-comply with the existing regulations in 2007 or 2008 (early emissions reduction credit) or for which compliance with emission control requirements under CAIR by 2009 would create undue risk for the reliability of the electricity supply.

On April 28, 2006, the USEPA promulgated a Federal Implementation Plan (FIP) that allows states until March 31, 2007 to adopt an abbreviated CAIR SIP. States are subject to the FIP as of June 27, 2006. As soon as a state submits a CAIR SIP and the USEPA approves it,

then that SIP replaces the FIP. The FIP incorporates the Federal CAIR program, including the three cap and trade programs.

The final CAIR FIP (40 CFR Part 91) provides that, in lieu of submitting full SIP revisions to replace the Federal CAIR requirements, each CAIR state has the option to submit limited SIP revisions - called "abbreviated SIP revisions" - that address only certain specified elements of the FIP trading programs. A state can choose to submit an abbreviated SIP revision for one or more of the applicable CAIR programs (the SO₂, NO_x annual, or NO_x ozone season program). By using an abbreviated SIP, a state modifies the application of certain provisions of the FIP trading program. An abbreviated SIP does not replace a FIP trading program. In a state with an approved abbreviated SIP revision for a FIP trading program, the FIP program remains in force in the state, USEPA is the implementing authority, and certain provisions in the FIP are modified by the abbreviated SIP to meet the state's needs. An abbreviated SIP revision is subject to USEPA review and approval. The Department proposes these rules, which it will submit to USEPA as an abbreviated SIP to address NO_x allocation.

The abbreviated SIP allows states to modify up to four elements of the Federal CAIR program, while utilizing the underlying infrastructure of the Federal cap and trade program. The abbreviated SIP approach permits a state (rather than USEPA) to allow units that are not otherwise CAIR units to individually opt into the FIP trading programs; allocate NO_x annual or ozone season allowances; allocate allowances from the NO_x annual compliance supplement pool; and include, in the CAIR FIP NO_x ozone season trading program, electric generating units (EGUs) less than 25 megawatts electrical output (MWe) and non-EGUs that are already covered

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reduce smog in the eastern United States).

Of the four elements that a state may modify, the Department proposes to take advantage of two options. The Department proposes to allocate NO_x annual and NO_x ozone season allowances using essentially the method in its existing NO_x Budget Program (N.J.A.C. 7:27-31). This method is different from the allocation method in the Federal rules. The Department also proposes to retire the annual NO_x compliance supplement pool, and not allow the USEPA to allocate the supplemental allowances to units. If the compliance supplement pool were allocated in accordance with the Federal scheme, the additional pool of allowances would increase the cap set in the Federal CAIR program. These additional emissions allowances would delay attainment in New Jersey of the health-based National Ambient Air Quality Standard (NAAQS) for ozone and PM_{2.5}.

The Department does not propose to include the non-EGUs and EGUs less than 25 MWe in the CAIR cap and trade programs because this would also increase the emissions cap. Finally, the proposed rules do not include an opt-in provision to allow units that are not otherwise regulated under CAIR to be subject to CAIR. The Department included an opt-in provision in the existing NO_x Budget Program, but no units chose to participate. Accordingly, the Department does not anticipate there would be interest in opting in the CAIR program and has not included opt-in option in order to simplify the program.

The Department proposes to replace the existing NO_x Budget Program with the CAIR NO_x Ozone Season Trading Program as of April 30, 2009. This will retain the continuity of an ozone season budget, transitioning from the NO_x Budget Program to the CAIR program.

Additionally, the Department proposes to amend the civil administrative penalty schedule to include penalties for failing to comply with the reporting requirements of the proposed CAIR NO_x Trading Program rules.

By proposing the abbreviated CAIR SIP, the Department is also conforming with USEPA guidance for fulfilling a requirement of Section 110(a)(2)(D)(i)(I) of the Clean Air Act (See 70 Fed. Reg. 21147-21151). On April 25, 2005, the USEPA issued a finding that all 50 states failed to submit SIPs to satisfy the requirements of Section 110(a)(2)(D)(i), commonly referred to as the Transport SIP. According to this finding, each state must submit a Transport SIP and the USEPA must approve these SIPs prior to May 25, 2007, or the USEPA will issue a FIP to address the transport requirements under Section 110(a)(2)(D)(i). The USEPA issued guidance on August 11, 2006 that indicates that CAIR states, such as New Jersey, can satisfy the requirements of Section 110(a)(2)(D)(i) by submitting the CAIR SIP or relying on the CAIR FIP.

The Department believes that the implementation of CAIR alone will not be sufficient to address interstate transport issues. According to the CAIR modeling, in the year 2010, between 26 and 82 percent (depending on the county in question) of New Jersey's 8-hour ozone is attributed to transported emissions. In addition to the Department's concern that the Federal CAIR program is not stringent enough and is not being implemented quickly enough to adequately meet attainment needs and provide timely protection of public health and welfare, the Department is concerned that the Federal CAIR program focuses solely on EGUs. As such, CAIR does not address interstate transport of emissions from the other sectors (such as non-EGUs, mobile sources, and sources whose emissions come into New Jersey from outside the State).

In light of these concerns, New Jersey plans to implement additional strategies in the future to address the transport of ozone precursor emissions both to and from the State. Actions that the Department determines to be necessary to attain and maintain the NAAQS in New Jersey, and to limit the impact that emissions from New Jersey sources have on neighboring states, will be included in revisions to New Jersey's SIPs, and implemented through future rulemakings.

A description of the proposed new rules follows.

N.J.A.C. 7:27-30.1 Purpose and scope.

The purpose of the proposed rules is to establish the annual (January 1 through December 31) and ozone season (May 1 through September 30) NO_x budget allocations for the Federal CAIR cap and trade program beginning in 2009. This section includes an explanation of how the proposed rules fit into New Jersey's goal to submit an abbreviated SIP to supplement the Federal CAIR program (40 CFR Part 97) with New Jersey's own NO_x budget allocations, as discussed in the Background above.

This subchapter addresses only the allocation of the annual and ozone season NO_x allowances and the compliance supplement pool. All other aspects of the CAIR cap and trade program, such as definitions, applicability, and compliance, will be regulated by 40 CFR Part 97. The Department is not incorporating the Federal rules by reference, because the Federal rules apply automatically unless the State submits to the USEPA a SIP that would implement some other program. As discussed in the Background above, the Department is proposing to submit to

the USEPA only an abbreviated SIP, which means that the Federal CAIR FIP would apply, except as modified in the within proposed rules.

N.J.A.C. 7:27-30.2 **Definitions**

Proposed N.J.A.C. 7:27-30.2 sets forth definitions based upon a model trading rule that the USEPA has made available to States that are submitting an abbreviated SIP. Definitions of units of measure and "net useful heat output" are the same as in the existing NO_x Budget Program rules at N.J.A.C. 7:27-31.

The proposed new rules include the following terms used in proposed new N.J.A.C. 7:27-30 regarding New Jersey's allocation of allowances. "Alternate CAIR designated representative" refers to the person authorized to act on behalf of the CAIR designated representative in matters pertaining to the CAIR trading programs. "Base emission budget" refers to the State budgets minus the reserves. "CAIR" refers to the Federal Clean Air Interstate Rules, which the proposed new subchapter modifies. "CAIR designated representative" refers to the person authorized to represent and legally bind each owner and operator in matters pertaining to the CAIR trading programs. "CAIR NO_x allocation rate" refers to the emission rate on which the emissions caps of the Federal CAIR Programs are based. "CAIR NO_x annual allowance" refers to a tradable allowance that represents the limited authorization to emit one ton of NO_x during a control period pursuant 40 CFR Part 97 Subpart AA through Subpart HH. "CAIR NO_x annual State budget" refers to the CAIR NO_x allowances given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EE to be allocated to CAIR units. "CAIR NO_x Annual Tracking System" refers to the system by which the USEPA records allocations, deductions, and

transfers of CAIR NO_x allowances under the CAIR NO_x Annual Trading Program. "CAIR NO_x Annual Trading Program" refers to an annual multi-state NO_x air pollution control and emissions reduction program established by the USEPA in accordance with 40 CFR Part 97 Subpart AA through Subpart HH. "CAIR NO_x annual unit" refers to a unit that is subject to the CAIR NO_x Annual Trading Program pursuant 40 CFR Part 97 Subpart AA through Subpart HH. "CAIR NO_x ozone season allowance" refers to a tradable allowance representing the limited authorization to emit one ton of NO_x during an ozone season control period pursuant 40 CFR Part 97 Subpart AAAA through Subpart HHHH. "CAIR NO_x ozone season State budget" refers to the CAIR NO_x ozone season allowances given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EEEE to be allocated to CAIR units. "CAIR NO_x Ozone Season Tracking System" refers to the system by which the USEPA records allocations, deductions, and transfers of CAIR NO_x ozone season allowances under the CAIR NO_x Ozone Season Trading Program. "CAIR NO_x Ozone Season Trading Program" refers to a multi-state oxides of nitrogen air pollution control and emissions reduction program for the ozone season established by the USEPA in accordance with 40 CFR Part 97 Subpart AAAA through Subpart HHHH. "CAIR NO_x ozone season unit" refers to a unit that is subject to the CAIR NO_x Ozone Season Trading Program pursuant 40 CFR Part 97 Subpart AA through Subpart HHHH. "CAIR unit" to refers to a CAIR NO_x annual unit for the CAIR NO_x Annual Trading Program and a CAIR NO_x ozone season unit for the CAIR NO_x Ozone Season Trading Program.

"Control period" refers, for the CAIR NO_x Annual Trading Program, to the period beginning January 1 of a calendar and ending on December 31 of the same year, and for the CAIR NO_x Ozone Season Trading Program, to the period beginning May 1 of a calendar and

ending on September 30 of the same year. "Department" refers to the New Jersey Department of Environmental Protection. "Hazardous air pollutant" refers to an air contaminant listed in or pursuant to 42 U.S.C. §7412(b). "Incentive reserve" refers to the allowances set aside to promote energy efficiency and renewable energy programs or techniques. "MMBtu" refers to one million British Thermal Unit. "MWh" refers to megawatt-hour. "Net electrical output" refers to the gross electrical output less the electrical energy consumed at the generating station(s) for station service or auxiliaries. "Net useful heat output" refers to one-half of the useful thermal output not associated with either the energy requirements for auxiliaries and emission controls or the net electric output performed by the steam generated. "New source/growth reserve" refers to the allowances set aside for new CAIR units and CAIR units that have lower NO_x emission rates than the CAIR NO_x allocation rates. In the years 2009 through 2011, a "new unit" refers to a permitted electric generating unit that has not operated prior to 2009 and, for the years 2009 through 2011, does not have three full control periods worth of data to be used for allocation calculation. A "new unit" in the years 2012 and thereafter cannot have commenced operation. "Output allocation rate" refers to the NO_x allocation rate based on output data, expressed in pounds per MWh. "Ozone season" refers to the period beginning May 1 of a calendar year and ending on September 30 of the same year. "Shut down" refers to discontinuing the use of a process, piece of equipment, control apparatus, or a source operation. "Unit" refers to a large stationary combustion unit. "USEPA" to refers to the United States Environmental Protection Agency. A "vintage" year refers to the first year that an allowance can be used.

N.J.A.C. 7:27-30.3 Allocation of CAIR NO_x annual allowances and CAIR NO_x ozone season allowances

Proposed N.J.A.C. 7:27-30.3 addresses the Department's allocation of the annual and ozone season NO_x allowances beginning in 2009. The proposed allocation method is similar to the New Jersey's NO_x Budget Program (N.J.A.C 7:27-31), including the New Source/Growth Reserve and the Incentive Reserve.

The NO_x Budget Program, N.J.A.C. 7:21-31, was adopted in 1998 by the Department in response to a 1994 Ozone Transport Commission Memorandum of Understanding. The Memorandum of Understanding was an agreement that committed the states in the Ozone Transport Region to establish regulations for the control of NO_x emissions from boilers and other indirect heat exchangers, which in turn established the cap and trade program for the NO_x Budget Program. This was the first NO_x trading program in the United States. On October 27, 1998, the USEPA published its final finding (63 Fed. Reg. 57356) that NO_x emissions from units in 23 jurisdictions (including New Jersey) significantly contribute toward nonattainment of the ozone NAAQS in one or more downwind states throughout the eastern portion of the United States. The USEPA required the 23 jurisdictions to adopt and submit revisions to their SIPs in order to assure that the units in each jurisdiction emit NO_x at a level that does not significantly contribute to nonattainment or interfere with the maintenance of the ozone NAAQS in a downwind state. This USEPA requirement is called the NO_x SIP Call and prompted a revision to New Jersey's NO_x Budget Program in 1999.

The New Source/Growth Reserve is a set-aside for new units and for existing clean units that were not initially included in the allocation or that operated for longer than the most recent

three-year period on which the allocation is based. The Incentive Reserve is an energy efficiency/renewal energy set-aside of allowances as an incentive to save or generate electricity through environmentally beneficial techniques, such as fuel cell, solar energy, or wind power. The major modification to the NO_x Budget Program method being proposed in these rules is to calculate all allocations using output data. In the Federal CAIR program, the heat input based NO_x emission rate for CAIR Phase 1 (years 2009 through 2014) is 0.15 pounds per MMBtu and for CAIR Phase 2 (years 2015 and thereafter) is 0.125 pounds per MMBtu. These rates are equivalent to 1.5 pounds per MWh and 1.25 pounds per MWh, respectively, based on an average heat rate of 10 MMBtu per MWh, which is typical for existing coal-fired boilers.

To meet the Federal requirements to submit state allowance allocations by April 30, 2007 for control periods in years 2009, 2010, and 2011, the Department proposes to calculate the allocations with output data from years 2003, 2004, and 2005. For years 2012 and thereafter, the allocations are due to the USEPA by October 31, 2008 and October 31 of each year thereafter for the fourth year after the year of the notification deadline. In other words, the allocation for control periods in 2012 is due in 2008 and will be calculated based on output data from years 2005 through 2007; the allocation for 2013 is due in 2009 and will be calculated based on output data from years 2006 through 2008; and so forth.

Because of the success of and the implementation efforts by industry in the State's NO_x Budget Program, the Department is proposing to use much of the language of existing N.J.A.C. 7:27-31.7 in the proposed State CAIR Program. This will also maintain the continuity between the NO_x Budget Program and the CAIR Program. Proposed N.J.A.C. 7:27-30.3(c)1, "Step 1," repeats N.J.A.C. 7:27-31.7(d)1, except the last sentence where the Department replaces the

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The NO_x allowance allocation process is divided into two parts: pre-control period allocation and post-control period allocation. The calculation of the allocations is based on a set of equations in N.J.A.C. 7:27-30.3(c) and (d). The pre-control period allocations start with the

emission rate of 0.15 pounds per MMBtu is replaced with the emission rates based on the

Federal CAIR program (1.5 pounds per MWh for years 2009 through 2014 and 1.25 pounds per

31.7(h). Proposed N.J.A.C. 7:27-30.3(g) repeats N.J.A.C. 7:27-31.7(j). Proposed N.J.A.C. 7:27-

Some of the abbreviations/symbols in the equations contained in these utilized sections have also

MWh for years 2015 and thereafter). Proposed N.J.A.C. 7:27-30.3(e) repeats N.J.A.C. 7:27-

30.3(h) repeats N.J.A.C. 7:27-31.17(h) with adjustments to meet Federal CAIR requirements.

been updated.

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30.3(c)1 equal to ten percent of the State's NO_x budgets. This is followed by the allocation of a set number of allowances to the Incentive Reserve in N.J.A.C. 7:27-30.3(c)2 equal to five percent of the State's NO_x budgets. The unallocated allowances from the New Source/Growth Reserve and the Incentive Reserve of the NO_x Budget Program for 2008 shall be carried over for use in the respective reserves under N.J.A.C. 7:27-30 for the 2009 CAIR NO_x ozone season.

The pre-control period allocation of allowances to CAIR units starts with N.J.A.C. 7:27-30.3(c)3. Equation 1 calculates the average NO_x emission rate based on the actual NO_x emissions divided by the net electrical output. If the average NO_x emission rate from Equation 1 is greater than 1.5 pounds per MWh for vintage years 2009 through 2014, or 1.25 pounds per MWh for vintage years 2015 and thereafter, then the pre-control period allowances to the unit is calculated with Equation 2. But if the average NO_x emission rate from Equation 1 is equal to or less than 1.5 pounds per MWh for vintage years 2009 through 2014 or 1.25 pounds per MWh for vintage years 2015 and thereafter, then the pre-control period allowances to the unit is calculated with Equation 3, which is based on the results from Equation 4 and Equation 5. Equation 4 calculates the allowable emission based on output data and the allocation rate. Equation 5 calculates the actual emission based on an average emission from previous years.

N.J.A.C. 7:27-30.3(c)4 determines if the allowance allocations calculated in N.J.A.C. 7:27-30.3(c)3 need to be prorated in the case of over-allocation where the number of allowances calculated is greater than the number of allowances in the State budget. In N.J.A.C. 7:27-30.3(c)4i, the allowances set-aside for the New Source/Growth Reserve, the allowances set-aside for the Incentive Reserve, any allowances allocated pursuant to N.J.A.C. 7:27-30.3(h) for end-of-

control period reconciliation, and the allowances from N.J.A.C. 7:27-30.3(c)3 are summed. If this sum is equal to or less than the State's NO_x budgets, then the allowances are allocated in the amounts equal to those determined in N.J.A.C. 7:27-30.3(c)3. If this sum is greater than the State's NO_x budgets, then the allowances are allocated in the prorated or proportional amounts equal to those determined by Equation 6.

The post-control period allocations start with the allocation of allowances to new units from the New Source/Growth Reserve. In N.J.A.C. 7:27-30.3(d)1i, new units that emitted NO_x at a rate less than the lower of 0.15 pounds per MMBtu for vintage years 2009 through 2014, or the lowest allowable emissions limit, are eligible to receive the amount of allowances equal to their projected emissions, unless prorating is required because of over-allocation. For new units that emitted NO_x at a rate less than the lower of 0.125 pounds per MMBtu for vintage years 2015 and thereafter, or the lowest allowable emissions limit, each new unit is eligible to receive the amount of allowances equal to its projected emissions, unless prorating is required because of over-allocation.

In N.J.A.C. 7:27-30.3(d)1ii, CAIR units are eligible for growth allowances if the unit's emissions are greater than the number of allowances allocated to the unit and only if the average actual emission rate for the control period is less than 1.5 pounds per MWh for vintage years 2009 through 2014, or 1.25 pounds per MWh for vintage years 2015 and thereafter. Equation 7 calculates the average actual emission rate and Equation 8 calculates the number of growth allowances to be allocated for eligible CAIR units. Equation 9 prorates the allocations from N.J.A.C. 7:27-30.3(d)1i and 30.3(d)1ii if the total of those two allocations is greater than the New Source/Growth Reserve.

Equation 10 in N.J.A.C. 7:27-30.3(d)3 determines the number of allowances to allocate for allowance claims from the Incentive Reserve. Equation 11 prorates the allocations from Equation 10 if the total number of incentive allowances claimed is greater than the number of allowances in the Incentive Reserve.

N.J.A.C. 7:27-30.3(d)4i and 30.3(d)4ii permits the allowances from the New Source/Growth Reserve and the Incentive Reserve to be used interchangeably if one reserve is over-allocated while the other is under-allocated, i.e., the number of allowances calculated is greater or less than the State budget. If there are allowances in the two reserves remaining, then N.J.A.C. 7:27-30.3(d)4iii allocates them to the CAIR units if there was over-allocation from N.J.A.C. 7:27-30.3(c). If there are still allowances in the two reserves remaining, then the allowances are carried forward in the reserves for next year.

 $N.J.A.C.\ 7:27-30.3(e)$ provides an explanation of how the Department will round the results from the calculation of the allocation to a whole number. This is the same method used in the current NO_x Budget Program.

N.J.A.C. 7:27-30.3(f) allows the Department to substitute data for use in the calculation of the allocation when there appears to be inaccurate data due to equipment malfunction that results in grossly over or under estimating the actual emissions. The Department shall consider other available data, such as emissions data from other stack testing at the facility or emissions estimates based on the amount of fuel the unit used, to substitute for the erroneous data. The NO_x Budget Program did not have a similar provision and, therefore, had a few occasions where units were under allocated in one year then followed by over allocation in the next two years. The proposed language should remedy that problem.

N.J.A.C. 7:27-30.3(g) requires that the allowances from permanently shut down units to be retired in accordance with the allowance retirement provisions in the Federal CAIR program. In the current NO_x Budget Program, the allowances from permanently shut down units are returned to the base emission budget. The Department proposes to retire the allowances, instead, because there is no mechanism in the Federal CAIR program to allow the allowances to be returned to the base emission budget. Retirement of the credits will further reduce pollution in the State. This retirement exemption is needed so a retired unit does not benefit from allowances that were previously allocated, even though the unit is no longer in operation.

N.J.A.C. 7:27-30.3(h) allows the Department to correct errors in allocation. If an account received too many allowances due to errors in calculations or an inaccurate emissions projection, then the Department shall reduce the allocation in the fifth year following the control period by the same amount. Similarly, if an account received too few allowances due to errors in calculations or an inaccurate emissions projection, then the Department shall increase the allocation by the same amount. An account that received too few allowances might not receive its full share immediately, because the State's CAIR budget may not have unallocated allowances. The proposed rule provides the Department as many as five years to reimburse an account for allowances that it should have received.

N.J.A.C. 7:27-30.4 The compliance supplement pool

The USEPA has allocated to New Jersey allowances equal to 660 tons of NO_x for possible use as a compliance supplement pool for the CAIR NO_x Annual Trading Program. The USEPA provides these allowances to states as an option to be allocated to units either as a

reward for reducing NO_x emissions more than is required under the existing regulations in 2007 or 2008, or for which compliance with emission control requirements under the Federal CAIR program by 2009 would create undue risk for the reliability of the electricity supply. The Department anticipates that the New Jersey CAIR units will be able to meet their emissions limits without risk to the reliability of the electricity supply by using the allowances allocated in accordance with proposed N.J.A.C. 7:27-30.3 and allowances available for purchase in the NO_x emissions trading market, without resorting to the compliance supplement pool. Accordingly, the Department proposes to retire the 660 allowances budgeted for New Jersey from the compliance supplement pool so the CAIR emissions cap is not artificially increased. The Department proposes to retire the allowances by not allocating them to CAIR units.

N.J.A.C. 7:27-30.5 Claims for incentive allowances

Proposed N.J.A.C. 7:27-30.5 uses the same language as existing N.J.A.C. 7:27-31.8, which established an incentive reserve in the NO_x Budget Program. The Department proposes to create in the State CAIR program an incentive for individuals to save or generate electricity by implementing environmentally beneficial techniques. Under the proposed rule, the Department would allocate annual and ozone NO_x allowances from an Incentive Reserve each year to individuals who have demonstrated that they have saved or generated electricity in that year by employing environmentally beneficial techniques such as generation through the burning of landfill gas, use of fuel cells, solar energy, or wind power. Individuals eligible to submit claims for Incentive Reserve allowances include specified New Jersey consumers of electricity, and the owner or operator of a unit that is not a CAIR unit, that commenced operating on or after 1992,

and that saves or generates electricity through one of the environmentally beneficial techniques set forth in the proposed rule, such as the use of fuel cell, solar energy, or wind power. These allowances may be sold in the NO_x emissions trading market for profit or retired for the benefit of the environment. By following the procedures outlined at proposed N.J.A.C. 7:27-30.5, the eligible individual may claim incentive allowances.

This rule proposal is incorporating by reference the guidance document "New Jersey Clean Energy Program – Protocols to Measure Resource Savings (New Jersey Clean Energy Protocols)," issued by New Jersey's Board of Public Utilities in September, 2004. This guidance document provides to individuals eligible for incentive reserve allowances the procedures on how to calculate the amount of electric generation or savings that can be claimed. These protocols use measured and customer data as input values in industry-accepted algorithms. The data and input values for the algorithms come from the program application forms or from standard values. The standard input values are based on the best available measured or industry data applicable for the New Jersey's Board of Public Utilities' programs. The standard values for most commercial and industrial measures are supported by end use metering for key parameters for a sample of facilities and circuits, based on the metered data from the JCP&L Shared Savings Program. These C&I standard values are based on five years of data for most measures and two years of data for lighting. Some electric and gas input values were derived from a review of literature from various industry organization, equipment manufacturers, and suppliers.

This section provides credit to the energy efficiency/renewable energy programs (EE/RE) sponsored by the New Jersey Board of Public Utilities (NJBPU). NJBPU sponsors many

programs that promote energy efficient techniques and renewable energy programs. Individual projects from these programs are often too small to constitute an entire allowance; therefore, in order that the environmental benefits of the projects are recognized, the proposed rule allows NJBPU to aggregate these projects and apply for an incentive allowance. In return, NJBPU retires the allowances allocated from the Incentive Reserve. This was a recommendation given by the "Final Report on the Clean Energy/Air Quality Integration Initiative – Pilot Project of the U.S. Department of Energy's Mid-Atlantic Regional Office" (May 2006).

N.J.A.C. 7:27-30.6 Reporting requirements

Proposed N.J.A.C. 7:27-30.6 addresses the reporting requirements that the Department proposes, in addition to those required pursuant 40 CFR Part 97 Subpart EE and Subpart EEEE. CAIR units shall submit the information to the Department, and the Department will use the data received in calculating the appropriate number of allowances that a unit should receive in accordance with proposed N.J.A.C. 7:27-30.3. The requested information is similar to what the existing NO_x Budget Program (N.J.A.C. 7:27-31.16) requires. The information includes identification of the CAIR unit, type of combustion unit, rated fuel capacity, any restriction on heat input or hours of operation, type of fuel burned, heat input, total actual NO_x emissions, net electrical output, net useful heat output, and most stringent allowable NO_x emission rate.

Additionally, the Department is proposing to require new units to provide a reasonable estimate of the NO_x emission for the control period, in order for the Department to allocate allowances to the new units. The USEPA requires allocations for new units to be submitted by October 31 of the same control period for the annual program, and July 31 of the same control period for the

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N.J.A.C. 7:27-31.23 Replacement of the NO_x Budget Program

The proposed rules combine the New Jersey NO_x Budget Program and the Federal CAIR program. The NO_x allocation process of the existing NO_x Budget Program becomes the NO_x ozone season allocation process under the State's CAIR program as of April 30, 2009, through the application of these proposed rules. Accordingly, N.J.A.C. 7:27-31.1 through 31.22 will no longer apply to any source in ozone seasons in years 2009 and thereafter.

Under the proposed amendments to the NO_x Budget Program, if a CAIR unit held insufficient allowances in its compliance account based on its 2008 emissions, the USEPA shall deduct 2009 CAIR ozone season allowances from the CAIR unit's account in the CAIR NO_x Ozone Season Trading Program. Similarly, any unit that is not a CAIR unit and that has insufficient allowances in its NO_x budget account for the 2008 ozone season will be required to purchase 2009 CAIR NO_x ozone season allowances at a three to one ratio to cover the deficiency, and transfer the allowances to the USEPA. This three to one ratio is in the Federal CAIR rule and in the existing NO_x Budget Program as a penalty for being deficient.

N.J.A.C. 7:27A-3.10 Civil administrative penalties for violation of rules adopted pursuant to the Act

The Department proposes new penalty provisions at N.J.A.C. 7:27A-3.10(m)30. The proposed penalties for failing to comply with the reporting requirements (see proposed N.J.A.C. 7:27-30.6) are consistent with penalties for comparable violations of N.J.A.C. 7:27.

On May 16, 2005, the Department published its adoption of amendments to the Air Administrative Procedures and Penalties rules at N.J.A.C. 7:27A to implement the Grace Period Law, N.J.S.A. 13:1D-125, et seq., which requires the Department to establish procedures to ensure the consistent application of grace (compliance) periods for minor violations of certain environmental statutes (See 37 N.J.R. 1789(a)). Pursuant to that law, the Department, through rulemaking, designates certain types of violations of rules contained in sixteen environmental statutes as minor or non-minor violations.

The Department has determined that, based upon the criteria set forth at N.J.S.A. 13:1D-129, violations of the within proposed rules at N.J.A.C. 7:27-30.6 are administrative, and would not result in an emission increase. Those violations are designated minor, and are subject to a grace period.

Social Impact

The Department anticipates that the proposed rules will have positive social impact. The Federal CAIR program is designed to reduce NO_x and SO_2 emissions and help the State make progress toward the attainment of the National Ambient Air Quality Standard (NAAQS) for ozone and fine particulate matter (PM_{2.5}) to, therefore, improve air quality and help make the

State a more healthful place to live. In this way the Federal CAIR program will help provide a better quality of life for New Jersey citizens. To further reduce the NO_x emissions from the Federal CAIR program, New Jersey proposes to not allocate the compliance supplement pool.

Ozone, to which NO_x contributes, can reduce lung function, make it more difficult to breathe deeply, and aggravate asthma, damage lining of the lungs that can lead to chronic respiratory diseases (www.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html). Fine particles are associated with a number of serious health effects, including premature mortality, aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems, such as heart attacks and cardiac arrhythmia (www.epa.gov/ttn/naaqs/standards/pm/s_pm_index.html). According to the USEPA, the health benefits from the Federal CAIR program outweigh the cost of compliance by 25 times (www.epa.gov/cleanairinterstaterule/). This means there is additional opportunity to cost effectively reduce air pollution from this source sector. By the year 2015 in the CAIR region, the Federal CAIR rule will prevent 17,000 premature deaths annually, millions of lost work and school days, and tens of thousands of non-fatal heart attacks and hospital admissions. Through its allocation of allowances, as proposed in these rules, the Department will further decrease NO_x emissions, as well as the effects of ozone on the citizens of New Jersey.

The proposed rules delineate the compliance obligation for the affected companies for the foreseeable future. This should provide a degree of certainty to those companies that will help them in their long-range planning. They will be able to choose whether to move incrementally to comply with the new lower emissions limits over a period of years, or whether to make any changes that are needed in their operation in a single undertaking.

The interstate trading provisions of the program allow regulated entities flexibility in how to achieve emission reductions. This will enable the managers of each company to develop a compliance strategy that is, for that company, the most cost-effective approach to compliance and the approach most compatible with how the company operates. This should minimize disruptions in the company's operations, as it complies with these requirements. This should also enable the costs of compliance to be minimized.

Through the promotion of energy efficiency, the proposed rules would positively impact New Jersey's CAIR program promotes energy efficiency through two methods. The USEPA encourages both of these options in the preamble of the Federal CAIR rule. First, the output-based allocation rewards more efficient units and encourages less efficient units to install control equipment. Second, the program allows for an Incentive Reserve for energy efficiency/renewable energy. The Incentive Reserve consists of allowances set aside to be allocated to individuals or units that saved or generated electricity through the implementation of certain environmentally beneficial techniques designated by the Department. This is a carry over from the existing New Jersey NO_x Budget Program and has been positively highlighted by the U.S. Department of Energy (DOE) in its June 2006 Final Report on Clean Energy/Air Quality Integration Initiative Pilot Project. Also, the Department is working with the New Jersey Board of Public Utilities (BPU) to allocate incentive allowances for BPU-initiated energy efficiency and renewable energy projects. The BPU's goal is for 6.5 percent of the electricity consumed in New Jersey to be from renewable sources by 2008, and 20 percent by 2020. These allowances would then be retired by the Board of Public Utilities to benefit the residents of New Jersey and

the environment, since the retired allowances would result in less emissions from the CAIR units.

Economic Impact

To the extent that any unit that is regulated under the NO_x Budget Rules, but is not included in the CAIR rules (a non-CAIR unit), and has insufficient allowances in its NO_x budget account for the 2008 ozone season, it must purchase NO_x allowances to cover the deficiency, and transfer the allowances to the USEPA.

The cost of compliance with the proposed rules is based upon the cost of NO_x allowances on the trading market, since the cost of each allowance is dictated by the market in a cap and trade program such as CAIR. As of August 2006, the price of NO_x allowances was approximately \$1,800 per ton. Using the USEPA estimate that 11,000 tons of NO_x will be reduced in New Jersey between 2003 and 2015 as a result of CAIR, the compliance cost for the State's companies is estimated to be \$19.8 million for this time period. This is far less than the USEPA estimated \$538 million in health benefits for New Jersey alone, resulting from the reduction in NO_x emissions in the State. The USEPA estimated the increase in the cost of electricity in New Jersey due to CAIR would be less than four percent. Accordingly, the Department concludes that the proposed rules will have a positive economic impact in New Jersey.

The cost to comply with this rule proposal is equal to the price of the NO_x allowances, which was approximately \$1,800 per ton of NO_x at the time this proposal was being drafted. Since this price fluctuates with the market, the decision to install control devices instead of

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Environmental Impact

The proposed rules will have a positive environmental impact. One of the underlying purposes of the proposed rules is to reduce the formation of ground-level ozone and PM_{2.5}. In the presence of sunlight, volatile organic compounds (VOCs) and NO_x and other compounds in the ambient air react to form ozone. Short-term exposure to ozone can irritate the respiratory system, causing coughing, throat irritation, and chest pain. Ozone can reduce lung function and make it more difficult to breathe deeply. Breathing may become more rapid and shallow than normal, thereby limiting a person's normal activity. Ozone also can aggravate asthma, leading to more asthma attacks that require a doctor's attention and the use of additional medication.

Increased hospital admissions and emergency room visits for respiratory problems have been associated with ambient ozone exposures. Longer-term ozone exposure can inflame and damage the lining of the lungs, which may lead to permanent changes in lung tissue and irreversible

reductions in lung function. A lower quality of life may result if the inflammation occurs repeatedly over a long time period, such as months, years, or a lifetime. People who are particularly susceptible to the effects of ozone include children and adults who are active outdoors, people with pre-existing respiratory diseases, such as asthma, and people with unusual sensitivity to ozone (www.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html).

The other underlying purposes of the proposed new rules is to reduce the formation of PM_{2.5}. Fine particles are formed in complicated reactions in the atmosphere of chemicals, including SO₂ and NO_x that are emitted from power plants, industries and automobiles. These particles, known as secondary particles, make up most of the fine particle pollution in the country. Fine particles are associated with a number of serious health effects, including premature mortality, aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems, including heart attacks and cardiac arrhythmia. The USEPA has estimated that attainment of the PM_{2.5} National Ambient Air Quality Standards would prolong tens of thousands of lives and prevent tens of thousands of hospital admissions each year, as well as hundreds of thousands of doctor visits, absences from work and school, and respiratory illnesses in children. Individuals particularly sensitive to fine particle exposure include older adults, people with heart and lung disease, and children. Health studies have shown that there is no clear threshold below which adverse effects are not experienced by at least certain segments of the population. Thus, some individuals particularly sensitive to fine particle exposure may be adversely affected by fine particle concentrations below those for the annual and the 24-hour National Ambient Air Quality Standards (www.epa.gov/ttn/naaqs/standards/pm/s_pm_index.html).

In addition to causing adverse health effects, ozone and fine particles adversely affect vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests, and other environmental stresses. In long-lived species, these effects may become evident only after several years or even decades, and thus have the potential for long-term adverse impacts on forest ecosystems. Damage from ozone and fine particles to the foliage of trees and other plants can also decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of the national parks and recreation areas. The economic value of some welfare losses due to ozone and fine particles can be calculated, such as crop yield loss from both reduced seed production, visible injury to some leaf crops, and visible injury to ornamental plants, while other types of welfare loss may not be fully quantifiable in economic terms, such as visibility impairment and reduced aesthetic value of trees growing in national parks. Visibility impairment is especially important in New Jersey, which has a Class 1 visibility area located at the Brigantine Wilderness area of the Edwin B. Forsythe National Wildlife Refuge.

As stated in the Economic Impact Statement, the USEPA estimated that CAIR would reduce 11,000 tons of NO_x in New Jersey by 2015, compared to 2003 levels. The proposed rules withhold the NO_x allowances in the compliance supplement pool from the market by retiring them, which will result in 660 fewer tons of NO_x emitted than if the compliance supplement pool were allocated. Additionally, the proposed rules promote energy efficiency and clean generation of electricity through the output-based allocation and the use of the Incentive Reserve for energy efficiency and renewable energy projects, which was endorsed by the USDOE report. The

Incentive Reserve is an integral part of the BPU's Clean Energy Program in which the BPU has set a goal of 20 percent of electricity consumed in New Jersey to be from renewable sources. This would result in the retirement of additional allowances and further improvement of air quality. The result from the proposed rules is a positive environmental impact on New Jersey because of cleaner air within the State.

Federal Standards Analysis

Executive Order No. 27(1994) and P.L. 1995, c.65 require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law. The Department has reviewed the standards and requirements of the proposed new rules, and compared them with the standards and requirements imposed by the Clean Air Act and 40 CFR Part 97. The only two requirements that the Department is proposing which are more stringent than Federal requirements are the retirement of the compliance supplement pool and the reporting requirement of output data for output based allocations. Both of these options are allowed under the Federal rules.

The reason for the proposed retirement of New Jersey's portion of the compliance supplement pool is to prevent any inflation of the emissions cap set for the CAIR NO_x Cap and Trade Program. Rather than allow any increase in the emissions cap, the Department wants to decrease emissions in order to provide healthier air for the citizens of New Jersey. The reason for the proposed reporting requirement of the output data is because that data is necessary for the Department to calculate the allowance allocations for the units based on an method that promotes energy efficiency and clean energy. The output data is not available from any Federal or State

program in a timely manner for the Department to be able to meet the due dates of the submission of the State allocations under the Federal requirements.

As stated in the Economic Impact statement, the cost of the CAIR cap and trade programs is estimated to be \$19.8 million, which is less than four percent of the \$538 million in health benefits estimated for New Jersey. Specifically, the 660 NO_x allowances from compliance supplement pool are worth \$1.88 million, and provide similar proportionately higher benefits for New Jersey.

The retirement of the allowances from the compliance supplement pool and the requirement of the output data are achievable with current technology. If the 660 compliance supplement pool allowances were retired, units can rely on existing control measures, such as selective catalytic reduction, or units can buy additional allowances available in the market to cover their NO_x emissions. The Department encourages compliance from emission reductions at New Jersey units to maximize air quality benefits in New Jersey. With respect to the output reporting requirement, the required data is either already available, can be calculated with available data, or can be measured with existing or readily available instruments.

Jobs Impact

The Department anticipates that the proposed rules will have little impact on employment in New Jersey, with no job loss or gain. There will be temporary increase in employment to the extent these rules result in the construction of air pollution control devices on electric generating units in New Jersey.

Agricultural Industry Impact

The Department anticipates that the proposed rules will have a positive impact on the agricultural industry in New Jersey. One of the environmental benefits expected to result from the proposed rules will be a reduction in emissions of NO_x and SO₂, which accumulate in air and deposit in soil, as well as in water. According to the USEPA, these depositions can make lakes and streams acidic, change the nutrient balance in coastal waters and large river basins, deplete the nutrients in soil, damage sensitive forests and farm crops, and negatively affect the diversity of ecosystems (www.epa.gov/oar/particlepollution/).

Since NO_x and SO_2 are precursors to particulate matter, and NO_x is a precursor to ozone formation, decreases in emissions of these chemicals will also result in reduced particulate matter and ozone. This reduction in particulate matter and ozone will have a positive impact by reducing the damage to agriculture. In addition to the damage on the foliage of plants and trees, ozone interferes with a plant's ability to produce and store nutrients, which makes plants more susceptible to disease, insects, other pollutants, and harsh weather. According to the USEPA, this damage impacts annual crop production throughout the United States, resulting in significant losses, and injures native vegetation and ecosystems (www.epa.gov/air/urbanair/ozone/index.html). Therefore, reduction in emissions of NO_x and SO_2 through the New Jersey allocation process will have a positive impact on the State's agriculture industry.

Regulatory Flexibility Statement

As required by the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has evaluated the reporting, recordkeeping and other compliance requirements that the proposed new rules and amendments would impose upon small businesses. The Regulatory Flexibility Act defines the term "small business" as "any business which is a resident in this State, independently owned and operated and not dominant in its field, and which employs fewer than 100 full-time employees." Based upon this definition, the Department does not believe any of the large stationary combustion units impacted by these rules are owned or operated by a small business.

There are 220 units in the existing NOx Budget Program. Of those, only 40 units would not be part of the proposed CAIR program. None of those units is owned or operated by a small business. Accordingly, no further analysis is required.

Smart Growth Statement

Executive Order No.4 (2002) requires State agencies that adopt, amend or repeal State regulations to include in the rulemaking document a Smart Growth Impact statement that describes the impact of the proposed rules on the achievement of smart growth and implementation of the State Development and Redevelopment Plan (State Plan).

The proposed rules do not impact the State's official land use and development policies in a way that would either encourage or discourage any development or redevelopment in this State contrary to the guiding principles of the State Plan. As a result, the Department does not expect

this rulemaking to have an impact on the State's achievement of smart growth, or implementation of the State Plan.

Insofar as the proposed rules implement a program to reduce emissions from large stationary combustion units, the proposed rules support the State Plan's goal of protecting the environment and preventing air pollution by implementing a strategy of reducing air pollution at the unit. By reducing emissions from large stationary combustion units, the adverse impact of these units in growth areas is reduced, improving the air quality for those who live and work in these areas.

Full text of the proposal follows (additions indicated in boldface <u>thus</u>; deletions indicated in brackets [thus]).

SUBCHAPTER 30. CAIR NO_x Trading Program

N.J.A.C. 7:27-30.1 Purpose and scope

(a) This subchapter establishes New Jersey's NO_x allocation for the Federal Clean Air Interstate Rule (CAIR) cap and trade program starting in 2009 pursuant 40 CFR Part 97

Subpart EE Appendix A and 40 CFR Part 97 Subpart EEEE Appendix A. The annual NO_x

CAIR cap and trade program covers from January 1 to December 31 of each year. The ozone season NO_x CAIR cap and trade program covers from May 1 to September 30 of each year and replaces the NO_x Budget Program. This subchapter also describes the allocation of the compliance supplement pool and the additional reporting requirement for output based data related to NO_x.

(b) This subchapter satisfies the requirements of an abbreviated SIP pursuant 40 CFR Part 97 for the CAIR Federal Implementation Plan (FIP). This subchapter addresses only the allocation of the annual and ozone season NO_x allowances and the compliance supplement pool.

All other aspects and requirements of the CAIR program are regulated under the Federal rules at 40 CFR Part 97.

N.J.A.C. 7:27-30.2 Definitions

The following words and terms used have the following meanings, unless the context clearly indicates otherwise:

"Alternate CAIR designated representative" means the person who is authorized by the owners and operators of the unit, in accordance to 40 CFR Part 97 Subpart AA through Subpart HH for the CAIR NO_x Annual Trading Program and 40 CFR Part 97 Subpart AAAA through Subpart HHHH for the CAIR NO_x Ozone Season Trading Program, to act on behalf of the CAIR designated representative in matters pertaining to the trading programs.

"Base emission budget" means the CAIR NO_x annual State budget and the CAIR NO_x ozone season State budget minus the New Source/Growth Reserve and the Incentive Reserve.

"CAIR" means the Federal Clean Air Interstate Rules at 40 CFR Part 97.

"CAIR designated representative" means the person who is authorized by the owners and operators of the unit, in accordance to 40 CFR Part 97 Subpart AA through Subpart HH for the CAIR NO_x Annual Trading Program and 40 CFR Part 97 Subpart AAAA through Subpart

HHHH for the CAIR NO_x Ozone Season Trading Program, to represent and legally bind each owner and operator in matters pertaining to the trading programs.

"CAIR NO_x allocation rate" means the emission rate on which the emissions caps of the Federal CAIR program are based. For vintage years 2009 through 2014, the allocation rate is 0.15 pounds per MMBtu. For vintage years 2015 and thereafter, the allocation rate is 0.125 pounds per MMBtu.

"CAIR NO_x annual allowance" means a tradable allowance that represents the limited authorization to emit one ton of NO_x during an annual control period pursuant 40 CFR Part 97

Subpart AA through Subpart HH. CAIR NO_x annual allowances can be used only in the CAIR NO_x Annual Trading Program.

"CAIR NO_x annual State budget" means the 12,670 CAIR NO_x annual allowances for years 2009 through 2014 and the 10,558 CAIR NO_x annual allowances for years 2015 and thereafter given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EE to be allocated to CAIR units.

"CAIR NO_x Annual Tracking System" means the system by which the USEPA records allocations, deductions, and transfers of CAIR NO_x annual allowances under the CAIR NO_x Annual Trading Program.

"CAIR NO_x Annual Trading Program" means an annual multi-state oxides of nitrogen air pollution control and emissions reduction program established by the USEPA in accordance with 40 CFR Part 97 Subpart AA through Subpart HH.

"CAIR NO_x annual unit" means a unit that generates electricity and that is subject to the CAIR NO_x Annual Trading Program pursuant 40 CFR Part 97 Subpart AA through Subpart HH.

"CAIR NO_x ozone season allowance" means a tradable allowance which represents the limited authorization to emit one ton of NO_x during an ozone season control period pursuant 40 CFR Part 97 Subpart AAAA through Subpart HHHH. CAIR NO_x ozone season allowance can only be used in the CAIR NO_x Ozone Season Trading Program.

"CAIR NO_x ozone season State budget" means the 6,654 CAIR NO_x ozone season allowances for years 2009 through 2014 and the 5,545 CAIR NO_x ozone season allowances for years 2015 and thereafter given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EEEE to be allocated to CAIR units.

"CAIR NO_x Ozone Season Tracking System" means the system by which the USEPA records allocations, deductions, and transfers of CAIR NO_x ozone season allowances under the CAIR NO_x Ozone Season Trading Program.

"CAIR NO_x Ozone Season Trading Program" means a multi-state oxides of nitrogen air pollution control and emissions reduction program for the ozone season established by the USEPA in accordance with 40 CFR Part 97 Subpart AAAA through Subpart HHHH.

"CAIR NO_x ozone season unit" means a unit that is subject to the CAIR NO_x Ozone
Season Trading Program pursuant 40 CFR Part 97 Subpart AAAA through Subpart HHHH.
"CAIR unit" means a CAIR NO_x annual unit for the annual trading program and a CAIR
NO_x ozone season unit for the ozone season trading program.

"Control period" means, for the CAIR NO_x Annual Trading Program, the period beginning January 1 of a calendar and ending on December 31 of the same year, inclusive. For the CAIR NO_x Ozone Season Trading Program, the period beginning May 1 of a calendar and ending on September 30 of the same year, inclusive.

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"Department" means the New Jersey Department of Environmental Protection.

"Hazardous air pollutant" means an air contaminant listed in or pursuant to 42 U.S.C.

\$7412(b).

"Incentive reserve" means the allowances set aside so that they are available for distribution after the control period to persons who claim incentive allowances, based on their saving or generation of electricity through the implementation of certain environmentally beneficial techniques.

"MMBtu" means one million British Thermal Units.

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"MWh" means megawatt-hour.

"Net electrical output" means the amount of gross electrical output less the electrical energy consumed at the generating station(s) for station service or auxiliaries consumed during the time the plant was operating (such as net busbar energy leaving the plant). Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross electrical output.

"Net useful heat output" means one-half of the useful thermal output not associated with either the energy requirements for auxiliaries and emission controls or the net electric output performed by the steam generated; that is, one-half of the heat output associated with the steam delivered to an industrial process.

"New source/growth reserve" means the allowances set aside so that they are available for distribution to new CAIR units. Remaining allowances would be held for CAIR units that have lower NO_x emission rates than the CAIR NO_x allocation rates. These allowances, if any,

would be available for distribution to any of these low NO_x emission rate units that emit more tons of NO_x than the number of allowances allocated to the units for the control period.

"New unit" means a unit:

- 1. For which an operating permit has been issued; and
- 2. For the years 2009 through 2011, that did not operate prior to 2009 and does not have three full control periods worth of data to be used for allocation calculation, and for years 2012 and thereafter, that has not commenced operation.

"Output allocation rate" means CAIR NO_x allocation rate converted to an output basis by multiplying it by 10 MMBtu per MWh, which is the average heat rate expressed in MMBtu per MWh corresponding to a baseline gross electrical generating efficiency of 32 percent. For vintage years 2009 through 2014, the output allocation rate is 1.5 pounds per MWh. For vintage years 2015 and thereafter, the allocation rate is 1.25 pounds per MWh.

"Ozone season" means the period beginning May 1 of a calendar year and ending on September 30 of the same year, inclusive.

"Shut down" means to discontinue use of a process, piece of equipment, control apparatus, or a source operation.

"Unit" means a large stationary combustion unit. For the NO_x Budget Program, unit includes electric generating units, co-generation units, industrial boilers, and process heaters.

For the CAIR NO_x Trading Program, unit includes electric generating units and co-generation units.

"USEPA" means the United States Environmental Protection Agency.

"Vintage" means the first year that an allowance can be used.

N.J.A.C. 7:27-30.3 Allocation of CAIR NO_x annual allowances and CAIR NO_x ozone season allowances

- (a) For control periods in years 2009, 2010, and 2011, the Department shall calculate the allocations based on data from years 2003, 2004, and 2005. The Department shall submit the allocations for control periods in years 2009, 2010, and 2011 to the USEPA by April 30, 2007.
- (b) For control periods in years 2012 and thereafter, the calculation of the allocation shall be based on data from the control period of the three most recent years prior to the year the allocation is due to the USEPA. The allocations for the control periods beginning in 2012 are due to the USEPA by October 31, 2008 and October 31 of each year thereafter for the fourth year after the year of the notification deadline. For example, the allocation for control periods in 2012, which is due in 2008, shall be based on data from 2005 through 2007, and the allocation for control periods in 2013, which is due in 2009, shall be based on data from 2006 through 2008.
- (c) Pre-Control Period Allocations: There are two separate control periods for each year,
 annual (January 1 through December 31) and ozone season (May 1 through September 30).

 The allowances in the CAIR NO_x annual State budget and the CAIR NO_x ozone season

 State budget shall be allocated in accordance with the following steps:
 - 1. Step 1: Allocation to the New Source/Growth Reserve. The priority of this reserve is to hold aside allowances so that they are available for distribution to new CAIR units.
 Remaining allowances would be held for CAIR units that have lower NO_x emission

rates than the CAIR NO_x allocation rates. These allowances, if any, would be available for distribution to any of these low NO_x emission rate units that emit more tons of NO_x than the number of allowances allocated to the units for the control period.

- i. Any unallocated New Source/Growth Reserve allowances from the NO_x Budget
 Program for the 2008 control period shall be carried over for use in the 2009
 CAIR NO_x ozone season.
- ii. The Department shall allocate 1,267 CAIR NO_x annual allowances and 665

 CAIR NO_x ozone season allowances of the State budgets each year into this reserve for vintage years 2009 through 2014.
- iii. For vintage years 2015 and thereafter, the Department shall allocate 1,056

 CAIR NO_x annual allowances and 555 CAIR NO_x ozone season allowances of the State budgets each year into this reserve.
- 2. Step 2: Allocation to the Incentive Reserve. The purpose of this reserve is to hold aside allowances so that they are available for distribution after the control period to persons who claim incentive allowances, based on their saving or generation of electricity through the implementation of certain environmentally beneficial techniques pursuant N.J.A.C. 7:27-30.5.
 - i. Any unallocated Incentive Reserve allowances from the NO_x Budget Program for the 2008 control period shall be carried over for use in the 2009 CAIR NO_x ozone season.

- ii. The Department shall allocate 634 CAIR NO_x annual allowances and 333 CAIR

 NO_x ozone season allowances of the State budgets each year into this reserve

 for vintage years 2009 through 2014.
- iii. For vintage years 2015 and thereafter, the Department shall allocate 528 CAIR

 NO_x annual allowances and 277 CAIR NO_x ozone season allowances of the

 State budgets each year into this reserve.
- 3. Step 3: Except as set forth in (g) below, this step is a determination of the number of allowances which are to be allocated in (c)4 (Step 4) to each CAIR unit that is not a new CAIR unit. In this step, the Department shall determine the number of allowances to be allocated to each CAIR unit that is not a new CAIR unit, in accordance with the following procedure:
 - i. Calculate the average NO_x emission rate (ER_{NOx}) of the unit, expressed in pounds per MWh, in accordance with the following equation:

Equation 1

$$ER_{NOx} = \frac{E_1 + E_2}{NEO_1 + NEO_2}$$

Where:

- $\underline{E_1}$ = The total actual NO_x emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;
- $\underline{E_2}$ = The total actual $\underline{NO_x}$ emissions, expressed in pounds, during the following control period: of the most recent three control periods, the

control period during which the unit had the second greatest actual net electrical output;

- NEO₁ = The net electrical output, MWh, during the following control period:

 of the most recent three control periods, the control period during

 which the unit had the greatest actual net electrical output;
- NEO₂ = The net electrical output, MWh, during the following control period:

 of the most recent three control periods, the control period during

 which the unit had the second greatest actual net electrical output; and
- ii. The number of allowances to be allocated to the unit is determined in accordance with the following procedure:
 - (1) If the average NO_x emission rate (ER_{NOx}) of the unit as calculated in (c)3i

 above is greater than output allocation rate, then the number of allowances

 for the units shall be determined in accordance with the following

 equation:

Equation 2

Allowances =
$$\frac{AR \times \left(\frac{\text{NEO}_1 + \text{NEO}_2}{2}\right) + \left(AR \times 0.293\right) \times \left(\frac{\text{NUHO}_1 + \text{NUHO}_2}{2}\right)}{2,000}$$

Where:

AR = The output allocation rate;

NEO₁ = The net electrical output, expressed in MWh, during the following control period: of the most recent three control periods, the control

period during which the unit had the greatest actual net electrical output;

- NEO₂ = The net electrical output, expressed in MWh, during the following

 control period: of the most recent three control periods, the control

 period during which the unit had the second greatest actual net

 electrical output;
- 0.293 = The conversion factor from MMBtu to MWh;
- NUHO₁ = The net useful heat output, expressed in MMBtu, during the following

 control period: of the most recent three control periods, the control

 period during which the unit had the greatest actual net electrical

 output;
- NUHO₂ = The net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;
- 2,000 = The factor for converting pounds into tons; and
- (2) If the average NO_x emission rate (ER_{NOx}) of the unit as calculated in (c)3i

 above is less than or equal to output allocation rate, then the number of
 allowances for the units shall be determined in accordance with the
 following equations:

Equation 3

$$Allowances = \frac{E_{Allowable} + E_{Actual}}{2}$$

Where:

 $\underline{\mathbf{E}}_{\text{Allowable}} = \mathbf{The \ average \ allowable \ emissions \ for \ the \ unit, \ as \ determined \ in}$ Equation 4;

 E_{Actual} = The average actual emissions for the unit, as determined in Equation 5; and

Equation 4

$$E_{Allowable} = \sum_{i=1}^{n} \left\{ \left(AER_{i} \times 10 \right) \times \left[\left(\frac{NEO_{1}^{i} + NEO_{2}^{i}}{2} \right) + \left(\frac{NUHO_{1}^{i} + NUHO_{2}^{i}}{2} \times 0.293 \right) \right] \right\} \times \frac{1}{2,000}$$

Where:

n = The number of types of fuel burned during the two greatest net
electrical output control periods during the most recent three years;

- $\frac{\text{AER}_{i} = \text{The lesser of the CAIR NO}_{x} \text{ allocation rate or the lowest allowable}}{\text{emission rate expressed in pounds per MMBtu for the unit for each}}$ $\frac{\text{type of fuel burned during the two greatest net electrical output}}{\text{control periods during the most recent three years;}}$
- The average heat rate expressed in MMBtu per MWh

 corresponding to a baseline gross electrical generating efficiency

 of 32 percent. Most existing electric utility steam generating units

 achieve an overall efficiency of 29 to 38 percent. The output
 based emission limit was, therefore, is calculated by multiplying

 the input-based emission limit by the heat rate corresponding to a

 32 percent gross electrical generating efficiency.

NEO_{2i} = For the specified fuel, the net electrical output, expressed in MWh,

during the following control period: of the most recent three

control periods, the control period during which the unit had the

second greatest actual net electrical output;

NUHO_{1 i} = For the specified fuel, the net useful heat output, expressed in

MMBtu, during the following control period: of the most recent

three control periods, the control period during which the unit had

the greatest actual net useful heat output;

NUHO_{2i} = For the specified fuel, the net useful heat output, expressed in

MMBtu, during the following control period: of the most recent

three control periods, the control period during which the unit had

the second greatest actual net useful heat output;

<u>0.293 = The conversion factor from MMBtu to MWh;</u>

2,000 = The factor for converting pounds into tons; and

Equation 5

$$E_{Actual} = \frac{E_1 + E_2}{2} \times \frac{1}{2.000}$$

Where:

- $\underline{E_1} = \frac{\text{The total actual NO}_x \text{ emissions, expressed in pounds, during the}}{\text{following control period: of the most recent three control periods, the}}$ $\frac{\text{control period during which the unit had the greatest actual net}}{\text{electrical output;}}$
- $\underline{E_2} = \frac{\text{The total actual NO}_x \text{ emissions, expressed in pounds, during the}}{\text{following control period: of the most recent three control periods, the}}$ $\frac{\text{control period during which the unit had the second greatest actual net}}{\text{electrical output;}}$
- 2,000 = The factor for converting pounds into tons; and
- 4. Step 4: The Department shall allocate the remainder of the allowances as follows:
 - i. The sum of the following shall be determined:
 - (1) The number of allowances allocated to the New Source/Growth Reserve in (c)1 (Step 1) above;
 - (2) The number of allowances allocated to the Incentive Reserve in (c)2 (Step 2) above;
 - (3) The number of allowances that have been allocated for a prior year pursuant to (h) below; and
 - (4) The number of allowances determined in (c)3 (Step 3) above to be allocated to each CAIR unit that is not a new CAIR unit;
 - ii. If the sum in (c)4i above is less than or equal to the CAIR NO_x annual State

 budget or the CAIR NO_x ozone season State budget, then the Department shall
 allocate allowances as follows:

- (1) Allowances shall be allocated to each CAIR unit that is not a new CAIR unit, as determined in (c)3 (Step 3) above;
- (2) Any remaining allowances that were not allocated in (c)1 (Step 1) above shall be carried over to the next control period's New Source/Growth Reserve;
- (3) Any remaining allowances that were not allocated in (c)2 (Step 2) above shall be carried over to the next control period's Incentive Reserve; and
- (4) Any remaining allowances that were not allocated in (c)4ii(1) above shall be allocated pursuant to (h) below; or
- iii. If the sum determined in (c)4i above is greater than the State budget for the

 control period, then the Department shall allocate the allowances to CAIR units

 in proportion to the amount of the determined in (c)3 (Step 3) above. The

 proportional share to be allocated to each shall be determined as follows:

Equation 6

Allowances =
$$\left(\text{Budget}_{\text{NJ}} - A_0 - A_1 - A_2\right) x \frac{\text{PA}}{\text{PA}_{\text{Total}}}$$

Where:

 $\frac{\text{Budget}_{\text{NJ}} = \text{The CAIR NO}_{\text{x}} \text{ annual State budget for the annual control period}}{\text{or the CAIR NO}_{\text{x}} \text{ ozone season State budget for the ozone season}}$

 A_0 = The total number of allowances that have been previously allocated pursuant to (h);

- A₁ = The total number of allowances allocated to the New

 Source/Growth Reserve in (c)1 (Step 1) above;

 A₂ = The total number of allowances allocated to the Incentive Reserve in (c)2 (Step 2) above;

 PA = The number of allowances determined for allocation to the unit as determined in (c)3 (Step 3) above; and

 PA_{Total} = The sum of the allowances determined for allocation to all CAIR
- (d) Post-Control Period: The Department shall allocate allowances from the New

 Source/Growth Reserve and Incentive Reserve by submitting allocation information to the

 USEPA as follows:

units under (c)3 (Step 3) above.

- The Department shall determine the number of allowances to be allocated from the New Source/Growth Reserve as follows:
 - allowances to be allocated to each new unit from the New Source/Growth

 Reserve. This number shall equal the projected number of tons of NO_x to be

 emitted by the unit during the control period pursuant N.J.A.C. 7:27-30.6(c),

 unless the emission rate exceeds the lesser of the CAIR NO_x allocation rate or

 the lowest allowable emissions limit during the control period, in which case the

 allowances allocated to the unit will be reduced by the difference between the

 projected NO_x emissions and the emissions at the lesser of the CAIR NO_x

allocation rate or the allowable emission rate during the period in which the unit exceeded this condition within the control period;

- ii. For any CAIR unit eligible to receive growth allowances, if the unit's NO_x

 emissions in tons during the past control period was greater than the number of
 allowances allocated to the unit for that control period, then the Department
 shall determine the number of allowances to be allocated to the unit from the
 New Source/Growth Reserve. The CAIR units that are eligible are units that
 emitted NO_x at a rate less than or equal to the output allocation rate, except that
 no new unit is eligible. The number of allowances shall be determined in
 accordance to the following procedure:
 - (1) Calculate the average actual emission rate (ER_{Actual}) of the unit for the current control periods in accordance with the following equation:

Equation 7

$$ER_{Actual} = \frac{E_{Actual}}{NEO_{Actual}}$$

Where:

 $\underline{E}_{Actual} =$ Actual emissions during the control period, expressed in pounds of \underline{NO}_x ; and

- NEO_{Actual} = Actual net electrical output during the control period, expressed in MWh;
 - (2) If the average actual emission rate (ER_{Actual}) for the CAIR unit as calculated in accordance with (d)1ii(1) above is greater than the output

allocation rate, then the Department shall allocate no allowances from the New Source/Growth Reserve to the CAIR unit;

(3) If the average actual emission rate (ER_{Actual}) for the CAIR unit as calculated in accordance with (d)1ii(1) above is not greater than the output allocation rate, and if the actual emissions during the control period is greater than the number of allowances allocated to the unit pursuant to (c)4ii(1) or (c)4iii above, then the Department shall determine the number of allowances from the New Source/Growth Reserve to the CAIR unit to be allocated in accordance with the following equation:

Equation 8

$$A_{Unit} = E_{Actual} - A$$

Where:

 $\underline{E_{Actual}} = \\ \hline The total NO_x emissions, expressed in tons, of the unit during the \\ \hline control period, minus any emissions due to the exceedance of an \\ \hline \underline{applicable maximum allowable emissions limit; and}$

A = The number of allowances that had been allocated to the unit pursuant to (c)4ii(1) or (c)4iii above;

- 2. The Department shall allocate allowances from the New Source/Growth Reserve as follows:
 - i. For the CAIR NO_x Annual Trading Program, allocate to new units by October
 31 of the control period;

- ii. For the CAIR NO_x Ozone Season Trading Program, allocate to new units by

 July 31 of the control period;
- iii. For both programs, allocate for the purpose of growth by March 1 of the year following the control period;
- iv. If the sum of all allowances determined to be allocated from the New

 Source/Growth Reserve under (d)1 above is less than or equal to the number of allowances contained in the reserve, then the Department shall allocate the number of allowances to each unit equal to the number of allowances determined to be allocated to that unit;
- v. If there are allowances left in the New Source/Growth Reserve after distributing
 the allowances in accordance with (d)2iv above, then the Department shall
 allocate the remaining allowances in accordance with (d)4 below;
- vi. If the sum of allowances determined in accordance with (d)1 above to be

 allocated to units from the New Source/Growth Reserve is greater than the

 number of allowances contained in the reserve, then the Department shall

 allocate all the allowances in the reserve, and each unit shall receive a number

 of allowances equal to its prorated share determined in accordance with the

 following equation:

Equation 9

$$Allowances_G = \frac{A_{Unit}}{A_{Total}} x A_{Reserve}$$

Where:

 $A_{\text{Unit}} =$ The number of allowances determined to be allocated to the unit, as determined in (d)1;

 $\underline{A_{Total}}$ = The total number of allowances determined to be allocated to all units, as determined in (d)1; and

 $\underline{A_{Reserve}} = \underline{M_{Reserve}} = \underline{M_{Reserve}} = \underline{M_{Reserve}}$

- 3. The Department shall allocate the allowances from the Incentive Reserve for the implementation of environmentally beneficial techniques which save or generate energy as follows:
 - i. The Department shall determine the number of allowances to be allocated to each claimant who submitted a claim for the incentive allowances within 30 days after the current control periods. After the claim has been received and approved by the Department pursuant to N.J.A.C. 7:27-30.5,the number of incentive allowances shall be determined in accordance with the following equation:

Equation 10

$$A_{Claim} = \frac{OAR}{2,000} \times Elec$$

Where:

OAR = The output allocation rate;

Elec = The amount of saved or generated electricity, expressed in MWh, in

the approved claim for the specified control period; and

2,000 = The factor for converting pounds into tons;

- ii. If the sum of all allowances determined to be allocated to claimants from the

 Incentive Reserve under (d)3i above is less than or equal to the number of
 allowances in the reserve, then the Department shall allocate to each claimant,
 the number of allowances determined to be allocated to that claimant;
- iii. If there are allowances left in the Incentive Reserve after distributing the

 allowances in accordance with (d)3ii above, then the Department shall allocate

 such allowances in accordance with (d)4 below;
- iv. If the sum of all allowances determined to be allocated to claimants from the

 Incentive Reserve under (d)3i above is greater than the number of allowances in
 the reserve, then the Department shall allocate all allowances in the reserve and
 each claimant shall receive a number of allowances equal to its prorated share
 determined in accordance with the following equation:

Equation 11

$$Allowances_{I} = \frac{A_{Claim}}{A_{Total}} x A_{Reserve}$$

Where:

A_{Claim} = The number of allowances determined to be allocated to the claimant under (d)3i above;

 $\underline{A_{Total}} = \underline{The total number of allowances determined to be allocated to all claimants under (d)3i above;$

 $\underline{A}_{Reserve}$ = The number of allowances in the Incentive Reserve;

4. If there are any allowances remaining in the New Source Reserve/Growth Reserve and/or the Incentive Reserve after allowances are allocated in accordance with (d)1

through (d)3 above, the Department shall allocate the remaining allowances in accordance with the following procedure:

- i. If there are allowances remaining in the Incentive Reserve after the allowances are allocated in accordance with (d)3 above, and if the number of allowances in the New Source/Growth Reserve were less than the total number of allowances determined to be allocated under (d)1 above for the current control periods, then the Department shall allocate allowances remaining in the Incentive Reserve to the units being allocated from the New Source Reserve/Growth Reserve. The number of allowances to be allocated to each unit shall be proportional to the number that each unit was under-allocated, relative to the number of determined allowances under (d)1 above, until the remaining allowances in the Incentive Reserve have all been allocated or until each unit is no longer underallocated, whichever comes first. Any remaining allowances left in the Incentive Reserve after this procedure takes place shall be allocated pursuant to (d)4iii below.
- ii. If there are allowances remaining in the New Source Reserve/Growth Reserve

 after the allowances are allocated in accordance with (d)2 above, and if the

 number of allowances in the Incentive Reserve were less than the total number

 of allowances determined to be allocated to claimants under (d)3 above for the

 current control periods, then the Department shall allocate allowances

 remaining in the New Source Reserve/Growth Reserve to the claimants begin

 allocated allowances from the Incentive Reserve. The number of allowances to

be allocated to each claimant shall be proportional to the number of allowances that each claimant was under-allocated, relative to the number determined to be allocated to the claimant under (d)3 above, until the remaining allowances in the New Source Reserve/Growth Reserve have all been allocated or until each claimant is no longer under-allocated, whichever comes first. Any remaining allowances left in the New Source Reserve/Growth Reserve after this procedure takes place shall be allocated pursuant to (d)4iii above.

- iii. The Department shall allocate any allowances remaining in the two reserves as follows:
 - budgets under CAIR for a specified control period, then the Department shall allocate allowances remaining in the reserves to CAIR units. The number of allowances to be allocated to each CAIR unit shall be proportional to the number that each unit was under-allocated, relative to the number determined to be allocated to the unit under (c)3 above, until the remaining allowances in the reserves have all been allocated or until each unit is no longer under-allocated, whichever comes first. Any remaining allowances left in the reserves after this procedure takes place shall be allocated pursuant to (d)4iii(2) below; and
 - (2) Any allowances remaining in the reserves that have not been allocated under (c)4iii(1) above shall remain in the Incentive Reserve or the New

Source Reserve/Growth Reserve to be available for allocation in the following year.

- (e) In the computations at (c) and (d) above to determine the number of whole allowances to

 be allocated, individual quantities of allowances with the highest decimals shall be rounded

 up and the remaining quantities of allowances with lower decimals shall be rounded down,

 such that the total amount of allowances allocated under the provision equals the total

 number of allowances available.
- (f) For the purpose of calculating the allocations pursuant to this section and N.J.A.C. 7:27-30.5, the Department shall, for any year for which the Department deems the data unusable because of equipment malfunction, consider other available data, such as stack testing at the facility or emissions estimates based on the amount of fuel the unit used. In such a case, the Department will notify the CAIR NO_x designated representative or the alternate CAIR NO_x designated representative.
- (g) Notwithstanding the provisions of (c) and (d) above, a CAIR unit that is permanently shut down shall retire any allowance that has been allocated for the year when the shut down occurred and for each year thereafter. Allowances shall be transferred to the USEPA for retirement pursuant 40 CFR Part 97 Subpart GG and GGGG.
- (h) The Department shall notify the authorized account representative if the Department

 determines that, during the current control periods or in any preceding control periods, the

 Department has erroneously allocated too many or too few allowances to an account, or, in

 allocating allowances, the Department relied upon data or projections that it determines are

 inaccurate.

- 1. If too many allowances were allocated, then:
 - The Department shall determine the number of allowances over-allocated to the account; and
 - ii. For the control period five years after the year when the over-allocation was made, the Department shall reduce the number of allowances allocated to the account pursuant (c) and (d) above by the number determined in (h)1i;
- 2. If too few allowances were allocated, then the Department shall:
 - i. Take unallocated allowances pursuant (c)4ii(4) for the year the under-allocation

 was made and deposit to the account a number of allowances equal to the

 number of allowances that was under-allocated;
 - ii. If there are not enough allowances pursuant (h)2i above, then take unallocated allowances pursuant (c)4ii(4) above for the first year after the under-allocation took place and deposit to the account a number of allowances equal to the number of allowances that was under-allocated.
 - iii. If there are not enough allowances pursuant (h)2i through (h)2ii above, then

 take unallocated allowances pursuant (c)4ii(4) for the second year after the

 under-allocation took place and deposit to the account a number of allowances
 equal to the number of allowances that was under-allocated;
 - iv. If there are not enough allowances pursuant (h)2i through (h)2iii above, then

 take unallocated allowances pursuant (c)4ii(4) above for the third year after the

 under-allocation took place and deposit to the account a number of allowances

 equal to the number of allowances that was under-allocated;

- v. If there are not enough allowances pursuant (h)2i through (h)2iv above, then

 take unallocated allowances pursuant (c)4ii(4) above for the forth year after the

 under-allocation took place and deposit to the account a number of allowances

 equal to the number of allowances that was under-allocated;
- vi. If there are not enough allowances pursuant (h)2i through (h)2v above, then the

 Department shall take from the base emission budget for the fifth year after the

 under-allocation took place a number of allowances equal to the number of

 allowances under-allocated, and deposit them to the account. The number of

 allowances deposited to the account shall be subtracted from the base emission

 budget of that year.

N.J.A.C. 7:27-30.4 The compliance supplement pool

(a) Notwithstanding the provisions of 40 CFR 97.143, none of the CAIR NO_x allowances listed for New Jersey in the table in 40 CFR 97.143(a) shall be allocated.

N.J.A.C. 7:27-30.5 Claims for incentive allowances

(a) In order to provide an incentive for the saving or generation of electricity through the implementation of certain environmentally beneficial techniques, pursuant to N.J.A.C.
7:27-30.3(d)3, the Department shall allocate allowances each year to persons who have demonstrated, in accordance with this section, that they have saved or generated electricity through such techniques.

- (b) Allocation of allowances pursuant to N.J.A.C. 7:27-30.3(d)3 shall be based on claims submitted. No such incentive allowances shall be allocated for any claim that is not received by the Department within 30 days of the control period in which the electricity savings or generation occurred.
- (c) The following persons are eligible to submit a claim for incentive allowances
 - 1. A New Jersey consumer of electricity who:
 - i. Purchases its electricity from an electricity supplier licensed in New Jersey; and
 - ii. Reduces its electricity consumption at a facility located in New Jersey through implementation of an energy efficiency measure, initiated in 1992 or thereafter, which:
 - (1) Belongs to a class to which the "New Jersey Clean Energy Program –

 Protocols to Measure Resource Savings (New Jersey Clean Energy

 Protocols)," issued by New Jersey's Board of Public Utilities in

 September, 2004 (http://www.state.nj.us/bpu/home/BO_CE.shtml),

 applies;
 - (2) Does not result in the construction, installation, or operation of a new emission unit or increase the emissions of any existing emission unit at the facility;
 - (3) Does not cause an increase in emissions of any hazardous air pollutant;

 and

- (4) Does not cause an increase greater than five tons per year in the emissions of any air contaminant regulated under N.J.A.C. 7:27 or the Federal Clean Air Act, 42 U.S.C. §§ 7401 et seq., other than NO_x.
- 2. The owner or operator of equipment that is not a CAIR unit, that commenced operation in 1992 or thereafter, and that generates electricity through one of the following environmentally beneficial techniques:
 - i. Generation through the burning of landfill gas or digester gas;
 - ii. Generation by a fuel cell; or
 - iii. Generation by using solar energy or wind power.
- 3. The owner or operator of equipment that generates electricity by another environmentally beneficial technique that results in a net reduction in NO_x emissions in New Jersey.
- 4. The New Jersey Board of Public Utilities, for the electricity saved or generated in environmentally beneficial techniques through the New Jersey's Clean Energy Program.
 - i. After the New Jersey Board of Public Utilities receives the incentive
 allowances from the Department, the New Jersey Board of Public Utilities will
 retire the allowances to benefit the environment.
 - ii. The sources covered by the New Jersey Board of Public Utilities' claim cannot separately claim incentive allowances.

- (d) Prior to filing a claim under this section, a person shall establish an account in the CAIR

 NO_x Tracking System and/or the CAIR NO_x Ozone Season Tracking System pursuant to

 CAIR.
- (e) A claim for incentive allowances shall include:
 - Documentation indicating that the person submitting the claim is eligible to submit a claim for incentive allowances pursuant to (c) above;
 - Identification of the control period (annual or ozone season) for which the claim is being made. A separate claim shall be submitted for each control period;
 - 3. The amount of electric generation or savings during the control period that is being claimed, expressed in MWh as calculated pursuant to (f) below;
 - 4. The calculations made to determine the amount of electricity generation or savings

 being claimed and a report of the data and the methods on which the calculations are

 based;
 - 5. The unique identification number assigned to the account held by the claimant in the CAIR NO_x Tracking System and/or the CAIR NO_x Ozone Season Tracking System; and
 - 6. Certification in accordance with N.J.A.C. 7:27-1.39.
- (f) The amount of electric generation or savings being claimed shall be determined as follows:
 - 1. For energy measures, the amount of electricity claimed to be saved shall be calculated pursuant to the guidance document: "New Jersey Clean Energy Program Protocols to Measure Resource Savings (New Jersey Clean Energy Protocols)," issued by New Jersey's Board of Public Utilities in September, 2004

(http://www.state.nj.us/bpu/home/BO_CE.shtml), incorporated herein by reference; and

- 2. For energy generation using an environmentally beneficial technique listed in (c)2 or (c)3 above, if the technique entails the supplemental use of conventional fuels (such as oil, gas, or coal), the total amount of electricity generated shall not include any amount of electricity generated by the use of such fuels.
- (g) A claim shall be submitted to the Department at the following address within 30 days after the control period for which the claim is sought:

Attn: NJ CAIR Incentive Allowance Claim
New Jersey Department of Environmental Protection
Bureau of Air Quality Planning
401 East State Street, 7th Floor
P.O. Box 418
Trenton, NJ 08625-0418

- (h) No incentive allowances shall be allocated unless the Department approves the claim. The Department shall disapprove of a claim if:
 - 1. The claim was not received by the Department within 30 days of the control period for which the claim is sought;
 - 2. The claim does not include all the items required at (d) and (e) above;
 - 3. The amount of electricity claimed to have been generated or saved was calculated incorrectly;
 - 4. The person submitting the claim is not eligible as specified at (c) above; or
 - The person submitting the claim did not establish an account in the CAIR NOx
 Tracking System and/or the CAIR NOx Ozone Season Tracking System pursuant to
 (d) above.

(i) The Department will notify the claimant in writing whether the incentive claim has been approved or denied.

N.J.A.C. 7:27-30.6 Reporting requirements

- (a) The owner or operator of a CAIR unit shall submit the following information on an electronic form available from the Department at www.nj.gov/dep/baqp:
 - 1. Information identifying the CAIR unit and type of combustion unit;
 - 2. The rated fuel capacity of the unit, expressed in MMBtu per hour;
 - 3. Whether a restriction on heat input or hours of operation exists, and if so, how much fuel or how many hours, and the period of time for which the restriction applies;
 - 4. For each control period:
 - i. For each type of fuel burned, the heat input, expressed in MMBtu;
 - ii. For each type of fuel burned, the total actual NO_x emission, expressed in pounds;
 - iii. For each type of fuel burned, the net electrical output, expressed in MWh; and
 - iv. For each type of fuel burned at a co-generation unit, the net useful heat output, expressed in MMBtu;
 - v. For each type of fuel burned, the most stringent applicable allowable NO_x

 emission rate, expressed in pounds per MMBtu;
 - vi. Any other information requested by the Department for allocating allowances pursuant to N.J.A.C. 7:27-30.3; and
 - vii. Certification pursuant to N.J.A.C. 7:27-1.39.

- (b) On or before September 1, 2007, the owner or operator of a CAIR unit shall submit to the Department the annual and the ozone season information specified in (a) above for calendar years 2003, 2004, 2005, and 2006. On or before July 1, 2008 and on or before July 1 of each year thereafter, the owner or operator of a CAIR unit shall submit the annual and the ozone season information specified in (a) above for the calendar year preceding the submission date. For example, the information for 2007 is due July 1, 2008, the information for 2008 is due July 1, 2009, and so forth.
- (c) In addition to the requirement of (a) above, the owner or operator of a new CAIR unit shall submit the following information on an electronic form available from the Department at www.nj.gov/dep/baqp:
 - 1. By October 1 of the control period for the CAIR NO_x Annual Trading Program:
 - i. Information identifying the CAIR unit;
 - ii. The total actual NO_x emission from January 1 to August 31 of the current control period, expressed in pounds;
 - iii. A reasonable estimate of a projected total NO_x emission from September 1 to

 December 31 of the current control period, expressed in pounds; and
 - iv. Certification pursuant to N.J.A.C. 7:27-1.39; and,
 - 2. By July 1 of the control period for the CAIR NO_x Ozone Season Trading Program:
 - i. Information identifying the CAIR unit;
 - ii. The total actual NO_x emission from May 1 to May 31 of the current control period, expressed in pounds;

- iii. A reasonable estimate of a projected total NO_x emission from June 1 to

 September 30 of the current control period, expressed in pounds; and
- iv. Certification pursuant to N.J.A.C. 7:27-1.39.
- (d) The information requested in (a) through (c) above shall be submitted to the Department electronically on an electronic form available from the Department at www.nj.gov/dep/baqp. If it is a hardship for an owner or operator to submit the requested information electronically, the owner or operator may annually request approval from the Department to submit the information requested in (a) through (c) above on a paper form. The Department shall approve such a request provided that:
 - The request is certified by the responsible official in accordance with N.J.A.C. 7:27 1.39 and submitted to the Department no later than March 1 of the submittal year;
 - 2. The owner or operator explains:
 - i. The hardship that electronic submittal would impose; and
 - ii. The steps the owner or operator will take to ensure the facility's ability to make electronic submittals in the future; and
 - 3. The owner or operator agrees to take reasonable steps to become able to submit the form electronically in future years.
- (e) Information submitted to the Department in accordance with (a) through (d) above shall be emailed to njdep-bapq@dep.state.nj.us, followed by a mailing containing a paper copy of the data and a properly signed certification pursuant to N.J.A.C. 7:27-1.39. The Department's mailing address is:

Attn: NJ CAIR Program
New Jersey Department of Environmental Protection

Bureau of Air Quality Planning 401 East State Street, 7th Floor P.O. Box 418 Trenton, NJ 08625-0418

- (f) After a CAIR unit permanently shuts down, the authorized account representative for the unit may obtain from the Department an exemption from the reporting requirements of this section in accordance with the following procedure:
 - 1. To obtain an exemption the authorized account representative shall submit a written request to the Department for exemption at the address:

Attn: NJ CAIR Program – Shut down
New Jersey Department of Environmental Protection
Bureau of Air Quality Planning
401 East State Street, 7th Floor
P.O. Box 418
Trenton, NJ 08625-0418

- A request for an exemption shall include identification of the CAIR unit and the date the CAIR unit shut down;
- 3. Upon verification that the unit has been permanently shut down, the Department shall approve the request and shall send written approval of the exemption from the reporting requirements of this section pertaining to the unit to the authorized account representative and the USEPA. The approval shall contain any conditions deemed necessary by the Department;
- 4. If the Department verifies that the unit has not been permanently shut down, the Department shall deny the request and shall send written notification of such denial to the authorized account representative of the unit.

compliance with all requirement of this section. An owner or operator who fails to submit the information required under this section shall be subject to civil administrative penalties in accordance with N.J.A.C. 7:27A-3. Compliance with the reporting requirements under this section does not relieve any owner or operator of a CAIR unit from the responsibility to comply with any other applicable reporting requirements set forth in any Federal or State law, rule, or regulation, or in the conditions of approval of any permit or certificate in effect.

N.J.A.C. 7:27-31.23 Replacement of the NO_x Budget Program

- (a) N.J.A.C. 7:27-31.1 through 31.22 shall not apply to any source as of the control period beginning in 2009 and any control period thereafter.
- (b) For a CAIR unit, as defined at N.J.A.C. 7:27-30.2, that has been determined to have held insufficient allowances in its NO_x Budget Program compliance account for the 2008 ozone season, the USEPA shall deduct the excess emissions from the unit's compliance account in the CAIR NO_x Ozone Season Trading Program pursuant 40 CFR Part 97 Subpart EEEE.
- insufficient allowances in its NO_x Budget Program compliance account for the 2008 ozone season shall purchase three vintage 2009 CAIR NO_x ozone season allowances, as defined at N.J.A.C. 7:27-30.2, for each ton of excess emission and shall transfer the allowances to the USEPA to cover the deficiency.

N.J.A.C. 7:27A-3.10 Civil administrative penalties for violation of rules adopted pursuant to the Act

- (a)-(l) (No change)
- (m) The violations of N.J.A.C. 7:27, whether the violation is minor or non-minor in accordance with (q) through (t) below, and the civil administrative penalty amounts for each violation are as set forth in the following Civil Administrative Penalty Schedule. The numbers of the following subsections correspond to the numbers of the corresponding subchapter in N.J.A.C. 7:27. The rule summaries for the requirements set forth in the Civil Administrative Penalty Schedule in this subsection are provided for informational purposes only and have no legal effect.
 - 1.-29. (No change)
 - 30. [(Reserved)]Violations of N.J.A.C. 7:27-30, Clean Air Interstate Rule, and the civil administrative penalty amounts for each violation, are as set forth in the following table:

<u>Citation</u>	Rule Summary	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-30.6	Reporting requirements	<u>M</u>	\$1,000	\$2,000	\$5,000	\$10,000

31. (No change)

(n)-(t) (No change)

Based on consultation with staff, I hereby certify that the above statements, including the Federal Standards Analysis addressing the requirements of Executive Order No. 27 (1994), permits the public to understand accurately and plainly the purposes and expected consequences of this proposal. I hereby authorize this proposal.

Date:	

Lisa P. Jackson, Commissioner Department of Environmental Protection