

**ENVIRONMENTAL PROTECTION  
ENVIRONMENTAL PLANNING AND SCIENCE  
AIR QUALITY MANAGEMENT  
NO<sub>x</sub> Budget Program**

**Adopted New Rules:** N.J.A.C. 7:27-31  
**Adopted Amendment:** N.J.A.C. 7:27A-3.10  
**Proposed:** September 15, 1997 at 29 N.J.R. 3924(b)  
**Adopted:** June 17, 1998 by Robert C. Shinn, Jr., Commissioner, Department of Environmental Protection.  
**Filed:** June 26, 1998 as R. \_\_\_\_\_ 1998 d \_\_\_\_\_ with substantive and technical changes not requiring additional public notice and comment (See N.J.A.C. 1:30-4.3).  
**Authority:** N.J.S.A. 13:1B-3, and 26:2C-1 et seq.  
**DEP Docket Number:** 21-97-07/636.  
**Effective Date:** July 20, 1998.  
**Operative Date:** August 16, 1998  
**Expiration Date:** N.J.A.C. 7:27, Exempt  
N.J.A.C. 7:27A, December 2, 1999

The Department of Environmental Protection (the Department) is adopting new rules at N.J.A.C. 7:27-31 entitled "NO<sub>x</sub> Budget Program. Please refer to the proposal for background information about this program.

**Summary of Hearing Officer's Recommendations and Agency Response:**

On October 17, 1997, the Department held a public hearing concerning the proposal in the public hearing room at the Department of Environmental Protection, 401 East State Street, Trenton, New Jersey. John Elston, Administrator of the Office of Air Quality Management, served as the Hearing Officer. After reviewing the oral testimony and written comments, Mr. Elston recommended that the Department adopt the proposed rule amendments with the changes described below in the Summary of Public Comments and Agency Responses and in the Summary of Agency-Initiated Changes. The Department has accepted the Hearing Officer's recommendations and adopts herein the proposed amendments, with changes. The Hearing Officer's recommendations are set forth in the hearing officer's report. A copy of the record of public hearing, which includes the hearing officer's report and the transcript of the public hearing, is available upon payment of the Department's normal charges for copying (\$0.75 per page for first 10 pages, \$0.50 per page for the following 10 pages, \$0.25 per page for additional pages). Persons requesting copies should contact the Office of Legal Affairs by telephone at (609)777-0716 or by writing to the following address:

ATTN: Docket #18-97-07/633  
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#### **Summary of Public Comments and Agency Responses:**

The Department received oral and/or written comments on its proposed amendments from the following persons:

1. Ronald J. Boraellino, Chief of the United States Environmental Protection Agency's Region II Air Programs Branch
2. Michael J. Brady of NRG Generating (U.S.) Inc.
3. Vincent J. Brisini, Environmental Manager of GPU Generation Inc.
4. Cris Cooley of SYCOM Enterprises
5. Daniel Cunningham, Manager of Atlantic Energy's Environmental Planning
6. Donald C. DiCristofaro, Vice President of Intercontinental Energy Corporation's Environmental Affairs
7. Clifford D. Evans, Jr., Manager of COGEN Technologies Energy Group's Compliance and Permitting
8. Lisa A. Fleming of Vineland Municipal Electric Utility
9. Steve Gabel, consultant representing the Independent Energy Producers of New Jersey.
10. Adam Kaufman, Executive Director of Independent Energy Producers of New Jersey
11. Barbara A. Kwetz, Director of the Commonwealth of Massachusetts Department of Environmental Protection's Division of Planning and Evaluation
12. Hugh McLaughlin, Director of Business Development of AirBank
13. Thomas R. Murphy, Vice President of HCE-Milford Inc. and Managing General Partner of Milford Power Limited Partnership (MPLP)
14. Christine T. Neely, Manager of Environmental Policy and Issues and Jon Perry, Senior Environmental Engineer of Public Service Electric and Gas Company (PSE&G)
15. Reverend Joseph R. Parrish, Rector of Saint John's Episcopal Church
16. John H. Paul, Vice President of the Center for Energy and Economic Development
17. Raymond C. Pennington, Jr, representing Local Union 210, International Brotherhood of Electrical Workers
18. Tom Romero, PE, Environmental Engineer of the U.S. Generating Company
19. Melody Shaffer, Director of the American Lung Association of New Jersey

20. Rebecca Stanfield on behalf of the New Jersey Public Interest Research Group Citizen Lobby, the New Jersey Society for Respiratory Care, and the New Jersey Chapter of Physicians for Social Responsibility.
21. Eugene M Trisko, Executive Director of Eastern Energy Alliance
22. H. R. Van Handle, Manager of Regulatory and Engineering Services, Tosco Refining Company

The number(s) in braces after each comment indicate the person(s) who submitted the comment as specified in the list above. The comments are as follows:

### General

1. COMMENT: As a co-signatory of the Ozone Transport Commission (OTC) Memorandum of Understanding (MOU), the Massachusetts Department of Environmental Protection encourages New Jersey and all other participating states to move forward as expeditiously as possible to establish rules that will ensure a smooth start-up of the OTC NO<sub>x</sub> Budget Program in the summer of 1999. {11}

RESPONSE: The Department agrees.

2. COMMENT: The Department received the following comments generally supporting the proposal:

The American Lung Association of New Jersey strongly supports the Commissioner Robert Shinn's plan to reduce nitrogen oxide emissions from New Jersey power plants. The additional tonnage proposed will improve the health of all humans and living organisms downwind of the plants both on land and in our waters.

Nitrogen oxide is a yellowish to reddish-brown pungent gas. It is an irritant to the respiratory system and increases the susceptibility to respiratory disease. It is also one of the chemicals leading to the formation of ozone. Ozone, itself, is a major respiratory irritant and New Jersey exceeded the proposed ozone health limit more than thirty-five times in 1997. Nitrogen oxide is a key ingredient in fine particulates, also known as soot. Ozone or smog and soot are especially harmful to children and people with respiratory diseases, including asthma, emphysema and chronic cough.

Our purpose here today is to add to the record the severe health effects which have burdened New Jersey residents and others for many years. In a state with almost eight million people New Jersey has four hundred and thirty-nine thousand people with asthma, and that includes both adults and children; sixty-eight thousand with emphysema and also eight hundred thousand people who suffer from bronchitis. These statistics are broken down by county and are attached to my testimony.

We also deplore the effects of acid rain and its involvement in the over-fertilization of our bays and waterways. For all of these reasons, nitrogen oxides should be reduced as quickly and as much as is possible. {19}

We urge the Department of Environmental Protection immediately to adopt new NO<sub>x</sub> emission standards which are at least ninety to ninety-five percent lower than currently

permitted. Only by this action will our children be able to survive into the next century. Now, when the NO<sub>x</sub> standards for New Jersey are being reviewed for reauthorization, now is the time when new greatly lowered NO<sub>x</sub> standards should be adopted by the New Jersey Department of Environmental Protection. Now is the time to save our children. Reverend Parrish also cited several statistics regarding childhood asthma, and mentioned ambient air quality monitoring, incinerators, studies regarding effects of ozone, and air quality modeling efforts. {15}

The Proposed NO<sub>x</sub> Budget Program is a necessary first step toward addressing the public health problems caused by air pollution, specifically ozone, in New Jersey. It appropriately drives New Jersey to be a leader in regional NO<sub>x</sub> reduction, and should be adopted without further delay.

We are extremely concerned about the severe public health and environmental threat posed by the continuing high levels of ground-level ozone or “smog” which plagues our state each summer. On 36 days last summer, smog levels in New Jersey reached concentrations that are hazardous to human health. This is a statewide problem that impacts the health of every single citizen who breathes the air. For the 136,000 children in New Jersey with asthma, and hundreds of thousands of adults with chronic respiratory disease, these high smog days mean staying indoors, or risking serious health consequences.

With this rule, the New Jersey Department of Environmental Protection is appropriately seeking major reductions in smog-forming NO<sub>x</sub> emissions from the electric power sector.

At the very least, in this day and age all power producers should be required to meet a minimum performance standard for NO<sub>x</sub> that has been proven achievable time and time again, over a number of years throughout the state. The United States Environmental Protection Agency (EPA) has long required “new” power plants, those built after 1977, to emit no more than .15 pounds of NO<sub>x</sub> per MMBTU of energy used. In 1997, it is more than reasonable to expect all power producers to meet this standard.

In the Department’s September 20, 1998 State Implementation Plan (SIP) submittal to EPA, the Department committed to adopting its NO<sub>x</sub> Budget Rule by August 1997. It is critical that the schedule for adopting the NO<sub>x</sub> Budget Rule not slip any further than it has at this point.

In addition, we would like to emphasize that the NO<sub>x</sub> Budget Rule is but one of the many important steps we must take as a state to protect public health and the environment. Additional steps must include enhanced automobile inspections, increased funding of transportation alternatives such as bike lanes, pedestrian walkways, public transit and alternative fuel vehicles, increased investment in energy efficiency and renewable energy, and continued push to regional pollution reductions. {20}

**RESPONSE:** The Department agrees. This adopted rule sets forth the NO<sub>x</sub> Budget Program in New Jersey without delay in implementation. The NO<sub>x</sub> emissions from NO<sub>x</sub> Budget sources will be capped in the 1999 control period. The Department is committed to the achievement of emission reductions of ozone precursors from a broad range of sources in order to achieve the ambient air quality standard for ozone. These emission reduction efforts include the enhanced motor vehicle inspection and maintenance, the Federal reformulated gasoline program, national low emission vehicle program, clean fuel fleets program, and VOC reductions from stationary/area sources.

3. COMMENT: The costs and risks associated with the proposed Program would have serious consequences for economic development in New Jersey. To the extent that other states within the OTR do not choose the same approach, New Jersey will be at a competitive disadvantage both regionally and nationally. New Jersey should be absolutely certain that the approaches developed for compliance with Federal air quality standards are economically sound and are based on good science. CEED is concerned by the apparent lack of evidence that the Department has conducted comprehensive subregional and urban-scale modeling studies required to ensure that such an extreme Program would generate an environmentally and economically justifiable result. The MOU Phase II compliance costs for New Jersey are significant, causing electric power generation costs within the State to increase by as much as \$2.00 to \$5.30 per megawatt-hour (MW-hr) during the 5-month ozone season of May through September. This seasonal compliance cost range spread is calculated total annual compliance costs for "perfect interstate" emissions trading and no trading cases across projected New Jersey fossil fuel generation during the five month ozone season (projected to be 5,128 GWh). The compliance costs were limited to utility generation only and therefore do not account for required reductions and associated compliance costs from industrial sources. This production cost increase is especially significant when compared to the average wholesale spot market price for power in the Pennsylvania-New Jersey-Maryland Interconnection (PJM) during the 1997 ozone season: \$14.76/MWh during off-peak periods and \$ 27.42/MWh during on-peak periods Source: Average of PJM Weekly spot power price indexes during period May 3-September 26, 1997 which were published in Power Markets Week

CEED strongly urges the Department to complete the air quality modeling studies necessary to justify the NO<sub>x</sub> Budget Program being proposed before any such program is adopted as regulation. Further, this modeling exercise must consider the potential effects of the EPA SIP Call before adopting emission reduction requirements that are infeasible for those facilities projected to make up the majority of the State's allocated budget. CEED strongly contends that an emissions reduction strategy that incorporates less stringent NO<sub>x</sub> reductions from stationary sources, in combination with an option or requirement that would allow credit for NO<sub>x</sub> and VOC emissions reductions from the mobile and area source sectors, and a more liberal emissions trading program, will provide a more effective and economic method of bringing New Jersey into compliance with the ozone standard. { 16 }

RESPONSE: The NO<sub>x</sub> reductions which will be achieved through this rulemaking along with the reductions from the other states participating in the OTC NO<sub>x</sub> Budget Program are necessary for the achievement of the national ambient air quality standard for ozone. The evidence from the modeling associated with the EPA's "Ozone Transport SIP Call" proposal (62 FR 60312, November 7, 1997, and 63 FR 25901, May 11, 1998) shows that significant NO<sub>x</sub> emission reductions from both within and without the Ozone Transport Region are necessary for areas currently exceeding the ozone standard to achieve the standard. Through the cap and trade concept of the NO<sub>x</sub> Budget Program, the program gives incentives for the most cost effective emission reductions to be achieved. Cost effective emission control technology is currently available for the types of sources applicable to the program. The New Jersey adjusted Phase III Budget of 8,200 tons is based on the OTAG recommendations and is very similar to the portion of EPA's SIP Call Budget applicable to the same criteria of sources in the NO<sub>x</sub> Budget Program.

N.J.A.C. 7:27-31.1    Purpose and Scope

4.    **COMMENT:**    The Department has not adequately considered or proposed alternative control strategies for local New Jersey ozone control. A comparison of the present pros and cons of the proposal to the pros and cons of potential VOC reduction strategies has not been considered. A comparison of this proposal to other potential NO<sub>x</sub> Reduction Strategies (i.e. LEV program) has not been considered or evaluated as an option. The Department needs to make significant progress in the mobile source category. The Department should start by immediately implementing the OTC LEV program (including the ZEV option) and making the CAA Clean Fleets Program mandatory, rather than voluntary. Comparison of the rule to alternative ozone control strategies involving further VOC reduction has not been considered. New Jersey has focused its efforts at reducing ozone on NO<sub>x</sub> emissions. This effort is a valid approach if the goal of the regulatory effort is based on the regional level. But, because New Jersey has broken away from the OTC/OTAG group and proposed alternative NO<sub>x</sub> reduction strategies, it appears that the New Jersey focus is to attempt to effect the local ozone concentrations. It has been shown, through recent OTAG photochemical modeling, that the control strategy that has the greatest effect on reducing local ozone concentrations is VOC controls. If the goal of the Department is to reduce ozone concentrations on a local level (i.e. within New Jersey), we submit that the most effective approach would be to concentrate on local VOC reduction regulations and regional NO<sub>x</sub>, rather than point source NO<sub>x</sub>. Comparison of the rule to other potential NO<sub>x</sub> Reduction Strategies (i.e. LEV program) has not been considered. New Jersey has focused on the utility industry for the bulk of the NO<sub>x</sub> emission reductions without focusing on the most significant causes of ozone exceedances. There are sources of NO<sub>x</sub> that are of equal magnitude as utilities. If these other sources of NO<sub>x</sub> were reduced, there would be more effective impact on local ozone concentrations. This source category is mobile sources. New Jersey could adopt the OTC Low Emission Vehicle (LEV) Program. The OTC LEV Program has been adopted by two other states in the Northeast (New York and Massachusetts). The addition of New Jersey would further support and encourage other states to adopt the OTC LEV Program. A similar program, the New Jersey Clean Fleets (NJCF) Program, has recently been proposed. The NJCF Program is a continuation of the Department leniency on mobile and other sources of NO<sub>x</sub>; except for large, elevated point sources such as utilities. The Department has proposed the NJCF program to be a voluntary program for industries. The EPA has required that any State proposed alternative Clean Fleet program be as stringent as the EPA Clean Fuel Fleet Program (CFFP). But, because the NJCF is a voluntary program, there are no guarantees that the NJCF will be as stringent as the mandated CFFP. Therefore, the Department has proposed that the unpromulgated LEV program will be used as a backup to the NJCF. The Department has proposed that the reductions seen by the OTC LEV will be more than enough to “cover” any shortcomings of the voluntary NJCF, compared to the CFFP. Another program is the Enhanced Inspection and Maintenance Program recently promulgated by the Department. This program will ensure that vehicle emission control equipment is not tampered with and that emissions from vehicles are maintained to below established limits. These three programs, along with other future programs for the control of mobile source NO<sub>x</sub>, should be promulgated to the most stringent level feasible and implemented aggressively by the Department in order to get a significant source of local NO<sub>x</sub> emissions reduced. In comparison, vehicle emissions are emitted on the ground level, while utility emissions are emitted at various elevated levels. Because vehicle emissions are

emitted on the ground level, the NO<sub>x</sub> emissions are directly contributing to the local ozone concentrations. Utility emissions of NO<sub>x</sub> are emitted into upper levels of the atmosphere that transport those NO<sub>x</sub> emissions to downwind locations and contribute to ozone concentrations at these locations. Therefore, if New Jersey wants to effect the ozone concentrations in New Jersey, the focus should be on sources that have a direct effect on New Jersey. The regional/transport phenomenon should be left in the hands of the EPA/OTC/OTAG effort, which seeks to “fairly” address NO<sub>x</sub> reductions based on extensive scientific review open to all parties prior to the establishment of NO<sub>x</sub> reduction plans. In summary, Atlantic’s recommendations are that if the Department wants to achieve significant NO<sub>x</sub> reductions, based on an established record and in direct conjunction with the EPA/OTC/OTAG process, the Department needs to look beyond stationary sources and tackle areas where real progress can be made. {5}

RESPONSE: This rule is one part of New Jersey’s overall State Implementation Plan for attainment of the national ambient air quality standards for ozone. There are several emission reduction efforts underway which apply to the mobile source sector: the enhanced motor vehicle inspection and maintenance, the Federal reformulated gasoline program, national low emission vehicle program, clean fuel fleets program. According to New Jersey’s SIP Attainment Demonstration, significant emission reductions in both VOC and NO<sub>x</sub> from mobile sources and stationary sources, both within and outside of the state of New Jersey are necessary for the attainment of the ozone standard within New Jersey. This program is not a departure from the OTC program nor the OTAG recommendations. In fact, it has been crafted to incorporate the OTAG recommendations for large stationary combustion sources. In conclusion, this rule is consistent with the portion of the proposed SIP Call regarding stationary sources and this rule is part of New Jersey’s overall efforts to attain the ozone standard, which also includes significant emission reductions from the mobile source sector.

#### N.J.A.C. 7:27-31.2 Definitions

5. COMMENT: The definition for “Allowance Deduction” reads as “the withdrawal by the NO<sub>x</sub> Allowance Tracking System (NATS) Administrator of one or more allowances from a NO<sub>x</sub> Allowance Tracking System general account or compliance account and the recording of such allowances in a retirement account.” EPA recommends New Jersey provide a clarification that though states will be able to deduct allowances for purposes other than annual reconciliation from general accounts, it will not be possible to deduct allowances for compliance from general accounts. New Jersey should distinguish between allowance deductions for compliance during end-of-season reconciliation and allowance deductions for other purposes by re-writing the definition as follows: “the withdrawal by the NATS Administrator of one or more allowances from a NO<sub>x</sub> Allowance Tracking System compliance account for purposes of end-of-season reconciliation (or from a general account for other deductions not directly related to compliance) and the recording of such allowances in a retirement account.” {1}

RESPONSE: The term “allowance deduction” is used in the Subchapter in the definitions of “compliance account” and “recorded” at N.J.A.C. 7:27-31.2 and at N.J.A.C. 7:27-31.18(d)2. The Department has altered the definition of “allowance deduction” upon adoption to clarify

that allowance deduction process only involves the transfer of allowances from compliance accounts with respect to the end-of-season reconciliation and the penalty deductions (N.J.A.C. 7:27-31.17 and 31.19). The Department has also amended the definition to clarify that the voluntary retirement of allowances may be deducted from general or compliance accounts. The Department has also clarified the procedures at N.J.A.C. 7:27-31.19 regarding penalty deductions to be consistent with this definition.

6. COMMENT: For clarity, we suggest adding the word “calendar” to the definition of the term “Allowance transfer deadline” to read as follows: “means midnight of December 31 of a given calendar year...” {14}

RESPONSE: The Department has amended the definition as suggested for clarity.

7. COMMENT: Definition of “Authorized account representative” For clarity, we suggest that the title “Authorized account representative” be revised to “Authorized account representative (AAR)”. {14}

RESPONSE: The Department has amended the definition as suggested for clarity.

8. COMMENT: The proposed definition of “British Thermal Unit” is inconsistent with the one proposed in N.J.A.C. 7:27-1.4, which was published in the August 18, 1997 New Jersey Register as part of the revisions to N.J.A.C. 7:27-8. The Department should reconcile this inconsistency.{14}

RESPONSE: The Department has amended the definition in order to be consistent with the same definition promulgated at N.J.A.C. 7:27-1.4, 8.1, 16.1, and 19.1.

9. COMMENT: “Budget Source” should be revised to read as “the OTR” and not “a the OTR.” {1}

RESPONSE: The Department has corrected this typographical error upon adoption.

10. COMMENT: Definition of “CEMS” The NO<sub>x</sub> Reasonably Available Control Technology (“RACT”) rule, specifically N.J.A.C. 7:27-19.1, contains definitions for the terms “continuous emissions monitor” and “continuous monitoring system”, which are different from the definition of “continuous emissions monitoring system” or “CEMS” contained in the proposed rule. PSE&G requests that the Department explain the differences between these terms, and, if necessary, reconcile any discrepancies in their meanings.{14}

RESPONSE: The definition used in this Subchapter is modeled after the definition provided in the model rule developed jointly by the Northeast States for Coordinated Air Use Management



(NESCAUM) and the Mid-Atlantic Regional Air management Association (MARAMA) entitled NESCAUM/MARAMA NO<sub>x</sub> Budget Model Rule and the OTC Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program. The Department has modified the definition upon adoption to more clearly reflect the source definitions. The definitions of "continuous emission monitor" and "continuous monitoring system" at N.J.A.C. 7:27-19.1 are more general in nature than the definition of "continuous emission monitoring system" in this Subchapter. There are no inconsistencies in their use; therefore, no reconciliation of the definitions are necessary.

11. COMMENT: The use of the term 'current year' is somewhat confusing as it is used throughout the rule, because of the tendency to read it as "now". Replacement with the more conventional "in any given year" or "in any given calendar year", followed by "that year" would be easier to read. {8}

RESPONSE: The proposed use of the term "current year" is appropriate. The provisions that use the term "current year" generally relate to allowance allocation and use. These provisions prescribe when the allowances will be allocated and when certain allowances can be used. The use of the term current year should be read as "now" within the boundaries of the years specified.

12. COMMENT: The phrase "or on behalf of" should be added to the proposed definition of "energy efficiency project" to read: "...is implemented by, or on behalf of, an electric consumer..." {14}

RESPONSE: The Department amended the definition upon adoption as suggested.

13. COMMENT: At the proposed definition of "energy efficiency project," Regarding the two alternative protocols for quantifying electricity consumption savings, PSE&G favors the use of Alternative 2, "International Performance Measurement and Verification Protocol (IPMVP) for Accrediting Emission Reductions for Energy Efficiency". {14}

RESPONSE: The Department has selected the first alternative. Please refer to the response to comment #117 regarding N.J.A.C. 7:27-31.8 for further elaboration.

14. COMMENT: The proposed definition of "heat input" is inconsistent with the definition given for this term in N.J.A.C. 7:27-19.1. The Department should reconcile this inconsistency. {14}

RESPONSE: The definition is revised upon adoption in order to achieve a greater consistency with the same definition at N.J.A.C. 7:27-19 and the NESCAUM/MARAMA Model Rule. The meaning of the adopted definition is substantially the same as the proposed definition.

15. COMMENT: “New Jersey budget” is defined as the base emission budget plus the amount added for opt-in sources. New Jersey should revise this definition to also include the amount added in 1999 due to early reduction credits. {1}

RESPONSE: The Department has amended the definition for clarification. The one time amount of allowances added only in the year 1999 for any sources that have earned early reduction allowances pursuant to N.J.A.C. 7:27-31.12 is part of the total budget of allowances. However, the amount of early reduction allowances are not part of the annual New Jersey Base Budget. Additionally, early reduction allowances are allocated directly to the sources that earned such allowances.

16. COMMENT: “Net useful work” is defined as the net electrical output plus one half the useful thermal output. However, this term does not appear to be used anywhere in the rule. This is also confusing since the definition seems to create two slightly different quantities, “net useful heat output” and useful thermal output. If the “Net useful work” definition is retained, New Jersey should clarify whether the parenthetical “(that is, steam delivered to an industrial process)” following the phrase plus one half the useful thermal output refers to “useful thermal output” or “one half the useful thermal output” {1}

RESPONSE: In the proposed rule, the term “net useful work” is only used in the term “net useful heat output.” The Department has removed the definition of “net useful work” upon adoption and is consolidating its meaning within the definition of “net useful heat output.” The revised definition of “net useful heat output” reads as follows:

“Net useful heat output” means one half of the useful thermal output not associated with neither the energy requirements for auxiliaries and emission controls nor the net electric output performed by the steam generated; that is, one half of the heat output associated with steam delivered to an industrial process.

17. COMMENT: Definition of “NO<sub>x</sub> Allowance Tracking System” For clarity, we suggest that the title “NO<sub>x</sub> Allowance Tracking System” be revised to read “NO<sub>x</sub> Allowance Tracking System (NATS)”. {14}

RESPONSE: The Department has amended the definition upon adoption as suggested. The Department has also similarly amended the definition of “NO<sub>x</sub> Emission Tracking System.”

18. COMMENT: The definition of “recorded” is awkwardly worded. For clarity, we suggest that the definition be revised to read: “means, in reference to an allowance transfer or an allowance reduction, that an account in the NATS has been updated by the NATS Administrator to reflect the details of an allowance transfer or allowance deduction.” {14}

RESPONSE: The Department has amended the definition for clarity.

19. COMMENT: The definition of “retirement account“ is awkwardly worded. For clarity, we suggest amending the first two sentences of the definition to read “means a NATS account which holds used or permanently retired allowances. The number of allowances in that account can be increased if additional allowances are transferred to it from another account.” {14}

RESPONSE: The Department has amended the definition as suggested to make the definition less awkwardly worded.

20. COMMENT: In the definition of “retirement account,” after the rather absolute statement “The number of allowances in the account shall never decrease,” perhaps there could be a qualifier of “except in the case of errors”? {8}

RESPONSE: The Department has modified the definition to indicate that the amount of allowances in a retirement account would decrease in the case when an error is corrected.

21. COMMENT: In the definition of “Retirement Account”, the word “be” should be added end of the first sentence to read “...will never be available.” {1}

RESPONSE: The Department has replaced the phrase containing this error with other language in response to comment #11.

22. COMMENT: New Jersey should revise the definition of “Submitted” to cover provisions in the rule where sources must submit documents to the Department. The following statement should be added to the definition of “submitted:”

“The date of a submission to the Department and the EPA shall be considered to be the date indicated by the official U.S. Postal Service postmarked on the envelope in which the document is mailed or, if the submission is made electronically, the electronic time stamp of the receiving agency.” {1}

At the definition of “Submitted,” for clarity and consistency with the OTC Model Rule, we suggest amending it to read:

“means information to the NATS or NETS has been sent to the appropriate authority under the signature of the AAR. For purposes of determining when something is submitted, an official U.S. Postal Service postmark or electronic time stamp establishes the date of submittal.”

We also feel that this definition should provide for documenting other modes of submission, including delivery by company courier, and delivery by private express mail agencies, such as Federal Express and United Parcel Service.{14}

RESPONSE: The Department has amended the definition to include submissions to the Department in addition to the NATS and NETS. In response to these comments and in a manner consistent with the OTC Model Rule, the Department has also amended the definition by specifying the criteria that determines when a document or electronic transition has been submitted.

N.J.A.C. 7:27-31.3    Applicability and general provisions

23. COMMENT: The applicability criteria set forth at N.J.A.C. 7:27-31.3 should be expanded to provide credit for reducing NO<sub>x</sub> and VOC emissions at any emission source (not just major stationary sources). The proposal is unduly discriminatory and unnecessarily costly due to its narrow focus around sources that account for only 25 percent of the ozone precursor emissions generated in New Jersey and without any evaluation of control options for other emission sources. The commenter cited EPA's Tier II Inventory Database as the source. The commenter cited the need for emission reductions of VOC and NO<sub>x</sub> from mobile and area sources. {16}

RESPONSE: The same source of information shows that although the sources in the electric utility and industrial fuel combustion categories emitted about 25 percent of the ozone precursors in 1990, the same categories emitted 50 percent of the NO<sub>x</sub> emissions. (Please see the response to comment #6.) This rule is one part of New Jersey's overall State Implementation Plan which also requires significant emission reductions of VOC and NO<sub>x</sub> emissions from stationary source, mobile source, and area source categories outside of the scope of this rule.

24. COMMENT: The NO<sub>x</sub> Budget Program should provide credits for (1) reductions from any emission source (e.g., mobile sources, area sources) and (2) inter-pollutant trading on an ozone equivalent basis (e.g., credit for VOC reductions) and (3) interstate trading under approved regional programs (e.g., developing EPA and OTC trading programs). Such an expanded approach would help to lower the overall cost of compliance by allowing sources to flexibly, innovatively and cost-effectively identify NO<sub>x</sub> reduction strategies that would provide the same benefit as direct emissions reductions, without necessarily incurring higher capital costs. By broadening the range of NO<sub>x</sub> reduction options eligible for inclusion as credits, the State also would be providing a more flexible mechanism for generating the air credits needed to encourage economic development. Mobile and local area source NO<sub>x</sub> and VOC reduction alternatives should compete with stationary source NO<sub>x</sub> control alternatives on an "ozone equivalent basis" to assure that the State implements the lowest cost ozone compliance solution possible. {16}

RESPONSE: The Department already has a program which provides credits for emission reductions from any source in its Open Market Emission Trading (OMET) Program as promulgated at N.J.A.C. 7:27-30. Inter-pollutant trading is not allowed in the OMET Program. The expanded approach recommended in the comment is outside of the scope and practical application of the NO<sub>x</sub> Budget Program at this time.

25. COMMENT: B. L. England Station should be treated as an exceptional circumstance with a separate and independent NO<sub>x</sub> reduction. Reasons for such treatment include the positive environmental benefits of B. L. England's operations in reducing solid waste such as tires (removal of over 2,000,000 tires per year). Atlantic's analysis of the possible culpability of B. L. England Generation Station to ozone exceedance events in the Ozone Transport Region

during 1995, 1996 and 1997 show for the majority of instances of ozone exceedance, emissions from Atlantic's B. L. England Station did not contribute to the exceedances. Only in the event that a Seabreeze was in progress in the same time frame as an ozone exceedance could there be any contribution from B. L. England. Moreover, there were only a few times during the study period that this occurred. Atlantic has made significant reductions in air pollution. Southern New Jersey needs a reliable, fuel diverse generation source. {5}

RESPONSE: The Department is not excluding the B.L. England Station from participation in the NO<sub>x</sub> Budget Program. The coal fired boilers at the B.L. England Station are among the largest NO<sub>x</sub> emitters in New Jersey. The geographic boundary of the NO<sub>x</sub> Budget program is the entire Ozone Transport Region (OTR), including coastal areas. All other major NO<sub>x</sub> sources located in coastal areas of the OTR are included in the NO<sub>x</sub> Budget Program. The B.L. England plant is near the center of the OTR and the center of ozone non-attainment of the OTR.

The Department has studied the modeling report provided by Atlantic Electric regarding the fate of BL England's NO<sub>x</sub> emissions and the potential impact of such emissions on the ambient ozone concentrations within the Ozone Transport Region. The report offers insufficient evidence to support Atlantic's conclusion that NO<sub>x</sub> emissions from B. L. England contribute no measurable amount to any New Jersey or Ozone Transport Region ozone exceedance. In the report two meteorological scenarios are analyzed and their effect on plume transport prior to and during ozone episodes discussed. No detailed photochemical modeling is included.

Upper air data from Rutgers University meteorological site located near New Brunswick, approximately 130 miles north of the B.L. England Station at Beesley's Point, were used to justify the claim that B.L. England's emissions will be transported out to sea when there is no sea breeze. No upper air data was provided for the B.L. England site. An analysis of the upper air wind field data measured at the New Brunswick site during 16 selected ozone events in 1996 and 1997 was conducted. The data indicated that nine events had winds at plume height from the south, southwest, or variable for a significant number of hours. With these wind directions B.L. England's emissions would likely contribute to ozone exceedances in the Ozone Transport Region. Hence, B.L. England could contribute to ozone exceedances in a majority (9 of 16) of episodes evaluated.

The assertion that sea breeze circulation rarely occurs during ozone episodes is also not supported by the data provided. Prior to and during New Jersey ozone events, a sea-breeze circulation along the coastline where the B.L. England Generating Station is located was found to exist 9 out of 14 days analyzed by Atlantic. Rather than showing no contribution to ozone exceedances, the report acknowledges that B. L. England's NO<sub>x</sub> emissions caught in the sea breeze could potentially contribute to ozone impacts for a majority of the episodes evaluated. As the B. L. England plume is transported inland, it will be "fumigated" downward to the ground by convective eddies that develop over the heated land surface within the seabreeze cell. In addition, during the following day, B. L. England's NO<sub>x</sub> emissions that have been transported inland by the previous days sea breeze could be captured in the southwestern regional transport winds near the surface and contribute to high ozone concentrations downwind in Northeast New Jersey, New York City, and beyond. The modeling of B.L. England's NO<sub>x</sub> emissions using the new shoreline dispersion model discussed in Appendix C of Atlantic Electric's comments was not submitted to the Department until June 17, 1998.

Also, NO<sub>x</sub> emissions from the plant exceed the significance level of 1 microgram of NO<sub>x</sub> per cubic meter (annual average) at the Brigantine Wilderness Area of the Edwin B. Forsythe National Wildlife Refuge, which is a Class I Air Quality Area, for the prevention of significant deterioration (PSD). This further demonstrates that the NO<sub>x</sub> emissions from the facility are major and have a significant impact on ambient air quality.

The Department values the beneficial aspects of energy generation in Southern New Jersey, including reliably satisfying the electricity needs of the region, providing employment and progressive waste management techniques. There are several flexibilities and incentives (including emission trading and submitting claims for incentive allowances for combusting tires) provided in this program that Atlantic Energy can take advantage of in order to continue its operations in Southern New Jersey.

26. COMMENT: N.J.A.C. 7:27-31.3(b). We commend the Department for responding to the concerns of PSE&G and other affected companies about errors in New Jersey's original baseline data, and for recommending appropriate changes in the baseline to the OTC. A New Jersey budget of 17,340 tons for 1999-2002 is obviously an improvement over the Department's original estimate of 15,430 tons. However, PSE&G believes that additional changes are warranted to provide New Jersey sources with their fair share of allowances, and make New Jersey's base emissions budget consistent with the NO<sub>x</sub> reduction principles outlined in the OTC MOU. Specifically, PSE&G suggests using Averaging Plan Emission Limits to represent RACT for Gas Turbines and amending Hoffmann LaRoche's 1990 emission baseline database status. {14}

RESPONSE: The Department is not amending the NO<sub>x</sub> emission budgets with respect to this comment. The Department completed its technical corrections to the 1990 Baseline last year. The Department had previously considered the changes suggested in the comment and rejected the changes. The Department has not made these changes to the baseline on the grounds that such changes would increase the size of the budget to an artificially high level, thereby reducing the environmental benefits of the NO<sub>x</sub> Budget Program.

27. COMMENT: In proposed N.J.A.C. 7:27-31.3(b)2, the Department indicates that the size of New Jersey's base emissions budget is 13,022 tons for 2003 and beyond. PSE&G believes that this figure significantly overstates the actual size of the New Jersey budget under the proposed rule, because 4,822 allowances are automatically removed from this total and made unavailable for use by affected sources. Therefore, the true size of New Jersey's base budget is 8,200 tons, which is 37 percent lower than 13,022 tons. {14}

N.J.A.C. 7:27-31.3(b)2 states that the base emissions budget for New Jersey will be 13,022 tons of NO<sub>x</sub> per year for the year 2003 and each year thereafter. The EPA SIP Call to mitigate transportation of NO<sub>x</sub>, consistent with the OTAG recommendations, proposes a 5,041 ton per year budget for utilities and a 26,741 tons per year for non-utility point sources, a total point source budget of 31,782 tons for New Jersey point sources. The different budget amounts addressing statewide emissions budgets for the same time periods are confusing, and this proposed rule does not explain the origin of the 13,022 ton proposed budget. Please reconcile the budgets to eliminate the confusion. {22}

RESPONSE: The 13,022 base emission budget for New Jersey represents the application of the default Phase III control level of the 1990 OTC emission baseline, as specified by the MOU. The Phase III base emissions budget is adjusted before allocation. The Department recognizes that this adjustment effectively reduces the allowances available for allocation. The EPA proposed the “Ozone Transport SIP Call” on November 7, 1997. This proposal prescribes target NO<sub>x</sub> emissions for 22 States in order to significantly reduce the impact of the transport of ozone precursors throughout the eastern portion of the continental United States. The EPA has subsequently revised the target NO<sub>x</sub> emission levels since the November 7, 1997 proposal. The differences between the SIP Call budget and the Phase III budget can be attributed to differences in applicability and the difference in control. The SIP Call Budget for electric generating point sources applies to all units, not just unit rated at 15 MW and greater as in the case of the OTC NO<sub>x</sub> Budget program. The SIP Call Budget for non-electric generating point sources also applies to a much wider range of sources than the OTC MOU criteria. The SIP Call Budget also differs from the OTC NO<sub>x</sub> Budget by applying an activity growth factor to its baseline and applying a different level of control to the activity. The Department has analyzed EPA’s latest SIP Call budget information as published in April of 1998. The Department has determined that the portion of the most recent version of the SIP Call Budget that applies to the same criteria of sources as the NO<sub>x</sub> Budget program in New Jersey is 9,002 tons of NO<sub>x</sub> during the May 1 through September 30 period. This figure would change to the extent that EPA fine-tunes its baseline emissions inventory.

28. COMMENT: Proposed N.J.A.C. 7:27-31.3(c) should be clarified to provide that the NATS administrator will allocate the allowances to New Jersey’s “authority account” and that the allowances will not yet be serialized at this point. From this account, the allowances can then be transferred into general State accounts. {1}

RESPONSE: The Department has clarified this subsection in order to better reflect the current terminology.

29. COMMENT: At N.J.A.C. 7:27-31.3(d), “an account” should be changed to “accounts” to read as follows is suggested: “All allowances shall be held in accounts within the... NATS....” {8}

RESPONSE: The Department has amended this provision to correct the grammatical error.

30. COMMENT: The Department received several comments on proposed N.J.A.C. 7:27-31.3(e) regarding the adjustment of the Phase III budget by transferring 4,822 allowances into the “discretionary” account and allocating the remaining 8,200 allowances:

The withholding of 4,822 allowances from the 2003 allocation process should be performed only if it is absolutely in order to comply with 1990 Clean Air Act Amendments and their resulting EPA rules. The number of allowances to be transferred to the discretionary general account should be held in abeyance pending the EPA’s response to the OTAG process

and the final amount should be determined so as to meet the new Federal requirements. The timing of this additional reduction should also be coordinated with the Federal action. {7}

The Department should reserve the adoption of the portion of the rule related to the allocation method for 2003 and beyond, pending action by EPA, on the basis that New Jersey should support consistent region-wide NO<sub>x</sub> standards. {14}

The rule should allow the Commissioner to redistribute this reserve to operating or new sources based on changing market conditions and improved ambient air quality. {22}

It does not seem possible that there are any uses of allowances deposited into the “discretionary” account that which could “contribute toward attainment” other than retirement. It was suggested that perhaps the Department could interject ‘directionality’ in using these allowances by selling them to downwind sources, however, since the budget is a cap and trade program where any source can sell to another, the trades all even out, and directionality cannot be forced. If it is true that there are no legitimate uses given this restriction, then the discretionary account is just another retirement account, and it is unfortunate that the Department so easily siphons off allowances from its program. If there must be a reduction in the 2003 allocation budget because of the EPA SIP call, then the number should just be reduced in the rule, without placing the allowances into the “discretionary account.” The use of this account for ‘leftovers’ from the already reduced 2003 allocation pool only serves to eliminate trading and put New Jersey sources at a disadvantage to other states. The ‘discretionary account’ should be eliminated. {8}

It is difficult to conceive of any way other than retirement that allowances placed in the “discretionary account could be used “which would contribute toward the attainment of maintenance of the National Ambient Air Quality Standard for ozone in New Jersey.” At the very least there must be more specific standards for the use of allocations placed in the retirement account to ensure that they are never withdrawn from that account and misused to undermine efforts toward attainment of the NAAQS in New Jersey. We propose an addition to the rule that would create a Citizen Advisory Group, which would create standards and guidelines for the use of the discretionary account. We also propose that this group would also be given the authority to block use of allocations in the discretionary account, should a majority of the members of the group believe that the proposed use of the allocations would be harmful to public health, or undermine attainment of the Federal clean air standards. {20}

My third point pertains to the placement of the 4,822 tons of NO<sub>x</sub> allowances in a discretionary account as opposed to permanently retiring those allowances. We believe that this is insufficient to ensure that these tons of pollution will no longer contribute to poor air quality affecting the health of New Jersey citizens. The limitation on the use of these allocations to purposes that “would contribute toward the attainment of maintenance of the National Ambient Air Quality Standard for ozone in New Jersey” simply does not provide sufficient assurance that we will not be plagued by this pollution in the future. For example, if New Jersey sells these allocations to a downwind state, what is to prevent that state from later selling those allocations to someone in Ohio? So, moreover, you know the notion that is acceptable to increase pollution in downwind states to make money which may or may not be used to reduce pollution somewhere else is ludicrous. It just does not give us an adequate level of comfort. {20}

This discretionary account should be opened to allow claims for the energy efficiency Incentive to be filled by it, if need be. It is difficult to imagine that the discretionary fund allowances could go to an activity more environmentally preferable. Energy efficiency allows the state economy to thrive while reducing all emissions associated with fossil fuel use. Any



other changes in the allocation system in 2003 should avoid placing any restriction, short of the size of the New Jersey Budget, upon the number of Incentive allowances that can be claimed for energy efficiency projects. {4}

RESPONSE: The Department is not changing the basic concept of the “discretionary” account nor the amount of allowances from the Phase III base emission budget to be deposited into the account. The amount of allowances deposited into the account would reduced the size of the budget to a value equivalent to applying a 90 percent reduction or 0.15 #/MMBtu control level to the 1990 OTC baseline emission inventory. This level was proposed to be consistent with the level of control in the OTAG recommendations (0.15 #/MMBtu). EPA’s SIP Call proposal incorporates OTAG’s recommendations. Based on the latest SIP Call emissions budget information issued by EPA, a NO<sub>x</sub> Budget of 8,200 tons is consistent with the portion of the SIP Call Budget that covers the same criteria of sources. This level of NO<sub>x</sub> control is not a unilateral action. The Ozone Transport Commission’s Mid-course evaluation of Phase III has yielded the recommendation, that each State implement the more stringent of the default Phase III NO<sub>x</sub> Budget Control or what the SIP Call would prescribe for the same criteria of sources.

To eliminate confusion regarding the purpose of this “discretionary” account, the Department is renaming it as the “attainment reserve account”. Since the discretionary nature of this account is extremely limited, and a name implying complete discretion is misleading. The name “attainment reserve account” better reflects its intent since the number of allowances reduced from the NO<sub>x</sub> Budget 1) reflect the a level for which non-attainment areas would reasonably be able to approach attainment of the ozone standard through the implementation of local control measures and 2) are approximately equivalent to the level of OTAG recommended controls for the categories of sources regulated under the NO<sub>x</sub> Budget Program. The Department has changed the name of this account throughout the Subchapter.

At this time, the Department is not considering the creation of a Citizen Advisory Group for this matter. However, in response to comment, the Department is adding additional rule language upon adoption providing that notice be published in the New Jersey Register of any proposed use, other than retirement, of “attainment account” allowances. Such notice would provide an opportunity for public comment on such proposed use and allow for discussion on how the particulars of the use would contribute toward the attainment or maintenance of the National Ambient Air Quality Standard for ozone in New Jersey. Such notice would provide an opportunity for any concerned citizen or group to comment and provide input prior to any allowance allocation.

At this time, the Department has no plans for any specific use of such allowances (other than retirement). One possibility for such use is the sale of NO<sub>x</sub> allowances to pay for the installation or improvement of local VOC controls. The details of such potential use would be evaluated and open to public comment to determine whether such use would “contribute toward the attainment or maintenance of the National Ambient Air Quality Standard for ozone in New Jersey.”

31. COMMENT: At N.J.A.C. 7:27-31.3(g), the statement that sources shall “...report the source’s actual NO<sub>x</sub> emissions during that year’s control period to the NETS administrator” should be reworded to more clearly state that all four quarters of data must be reported to the NETS Administrator. {1}

RESPONSE: The provision states that sources must report emissions to the NETS pursuant to N.J.A.C. 7:27-31.16(c). This referenced provision specifies the reporting frequency for CEM based systems is every quarter and specifies the reporting frequency for non-CEM based systems is the second and third quarters of each year.

32. COMMENT: There is a typographical error in proposed N.J.A.C. 7:27-31.3(k). The reference to N.J.A.C. 7:27-21.12 should be changed to N.J.A.C. 7:27-31.12. {14}

RESPONSE: The Department has corrected this typographical error upon adoption.

33. COMMENT: At N.J.A.C. 7:27-31.3(n), the reference to “40 CFR Part 75” should be “Part 72 - 78.” {1}

RESPONSE: The Department has corrected the citation upon adoption.

#### N.J.A.C. 7:27-31.4 Opt-in provisions

34. COMMENT: Proposed N.J.A.C. 7:27-31.4(a) indicates that the sources eligible to opt-in to the NO<sub>x</sub> Budget Program are sources that are neither “a fossil fuel-fired boiler or indirect heat exchanger with a maximum rated heat input capacity of at least 250 MMBtu per hour nor an electric generating unit with a rated output of at least 15 MW”. This implies that opt-in sources are sources that would not normally be considered budget sources. In order to be more consistent with the language in the definition of “budget source,” the Department should strike the words “boiler or” from the phrase “a fossil fuel-fired boiler or indirect heat exchanger...” because 1) this language is not used in the definition of “budget source” and 2) a boiler is an indirect heat exchanger. {14}

RESPONSE: The Department has amended this provision for consistency with language in other provision of the rule. This change does not alter the meaning of the provision.

35. COMMENT: Proposed N.J.A.C. 7:27-31.4(c)3 specifies that a source voluntarily seeking to opt-in to the NO<sub>x</sub> Budget program must submit information regarding the operation of the source in order to determine the baseline emissions. According to the *Executive Summary of the Report of the OTC Stationary/Area Source Committee* from the Ozone Transport Commission (OTC) Commissioner’s May 20, 1997 meeting, this information to determine baseline emissions should address load shifting, where an opt-in source shall include all sources to which production may be moved. New Jersey should include a similar provision under this section, or clarify how the issue of load shifting has been addressed for opt-in sources. {1}

RESPONSE: The shifting of load is addressed in the deduction of allowances from an opt-in source’s compliance account in the case where the opt-in source’s activity is curtailed below

its baseline activity. This deduction is set forth at N.J.A.C. 7:27-31.4(k) and N.J.A.C. 7:27-31.17(g)3. If load is shifted away from the opt-in source after it has established a baseline, then in the reconciliation process current year allowances will first be deducted from the compliance account proportional to the extent that the source curtailed its activity. This allowance deducted relating to the curtailment of activity will occur before any allowances are deducted relating to the use of allowances that authorize NO<sub>x</sub> emissions during the control period. Shifting of load from an existing budget source to the an opt-in source is also addressed in that no additional allowances would be allocated to an opt-in source if its activity increases beyond the level established when it opted-in, and it would need to draw allowances from the market. In general, the shifting of load from budget sources to non-budget sources within the OTR, which have capacities less than 15 MW, is likely to be insignificant due to the higher cost per energy production of operating such smaller units.

36. COMMENT: At N.J.A.C. 7:27-31.4(c)4, since this is the first place where the monitoring guidance documents are mentioned as incorporated by reference, New Jersey should include reference to the other documents being incorporated, specifically “*Ozone Transport Commission NO<sub>x</sub> Budget Emissions Reporting Requirements (Electronic Data Reporting version 2.0)*” and “*Ozone Transport Commission NO<sub>x</sub> Budget Emissions Monitoring Certification and Reporting Instructions*,” prepared for Ozone Transport Commission and US EPA Acid Rain Division, prepared by Perrin Quarles Associates, Inc., July 3, 1997. {1}

RESPONSE: The Department has referenced the guidance documents relating to monitoring requirements at N.J.A.C. 7:27-31.14, Emissions monitoring, and the guidance document relating to electronic data reporting at N.J.A.C. 7:27-31.16, Reporting. Instead of incorporating all of these documents by reference into the Subchapter at the opt-in provisions, the Department has created a new section (N.J.A.C. 7:27-31.21) that incorporates all referenced documents used in the Subchapter in a single, clearly evident location. The Department has also simplified the provisions in the Subchapter that specify the reference documents.

37. COMMENT: At N.J.A.C. 7:27-31.4(c)4, the Department references the “*Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program*.” New Jersey should further clarify this reference by removing the language “... as are any subsequent revisions thereto.” While EPA understands the desire to recognize this document as a living document, this language would make the incorporation by reference of this guidance document unenforceable. This comment is also relevant to proposed N.J.A.C. 7:27-31.14. {1}

RESPONSE: The Department has kept the language incorporating any subsequent revisions to the guidance document. The purpose of this language is to prevent forcing persons into a noncompliance situation during the period between when the guidance changes and when any corresponding amendment to the rule occurs. Instead of removing the language, the Department has added language to the rule to address the root of the commenter’s concern. This concern hinges on the legal responsibility of a sufficient public participation process for rules incorporated into the State Implementation Plan and that incorporating subsequent revisions to guidance documents by reference would circumvent this public comment process.

The Department has therefore added a provision at N.J.A.C. 7:27-31.21(c) that requires the State to notify the public about any forthcoming changes to the guidance document, allow public comment, and submit the revised guidance document to EPA.

38. COMMENT: Proposed N.J.A.C. 7:27-31.4(d) indicates that the Department will increase New Jersey's emissions budget to accommodate opt-in sources. Although it may be implied, the rule does not state, however, that allowances for existing budget sources will remain unaffected by the inclusion of opt-in sources. PSE&G requests that the Department include explicit language which protects the allocation of existing budget sources when adjustments are made to the budget to accommodate opt-in sources. {14}

RESPONSE: The commenter is correct that the opt-in provisions have no effect on the allocation of allowances to budget sources that are not opt-in sources. The allowance allocation provisions are clear regarding how the allowances are allocated: opt-in source are allocated pursuant to N.J.A.C. 7:27-31.7(f) and are excluded from allocation of allowances pursuant to N.J.A.C. 7:27-31.7(b)-(d). No additional rule language is necessary.

39. COMMENT: At proposed N.J.A.C. 7:27-31.4(e)2, the word "which" should be added to the provision to read "The proposed opt-in source is not a type of source for which an emissions monitoring plan..." {8}

RESPONSE: The Department has corrected this error upon adoption.

40. COMMENT: New Jersey should clarify how a new source or a source which has operated for less than two years will meet the methodologies at N.J.A.C. 7:27-31.4(i) and(j) which require at least two years of data. {1}

RESPONSE: The provisions preclude sources having less than two consecutive ozone seasons of operation from opting into the NO<sub>x</sub> Budget Program. This is a relatively moot point, since new sources would be required to install Lowest Achievable Emission Rate (LAER) or State-Of-The-Art (SOTA) control technology and would unlikely be able to reduce NO<sub>x</sub> emissions far enough below the required emission rate to make opting into the NO<sub>x</sub> Budget Program a realistic incentive until long after startup when any new control technology becomes available.

41. COMMENT: At N.J.A.C. 7:27-31.4(i)3i, The opt-in provision for a large (greater than or equal to 250 mmBtu per hour heat input) non-affected source is a significant deterrent to that source opting-in to this program. To opt-in, a source must make extreme emissions reductions that it would otherwise not have to make. This appears to be a punishment rather than a reward to a source that would decide to opt-in to the most effective program to achieve and maintain an ambient standard. Since that source could trade under the Open Market Trading Rule (OMTR), what is the incentive to participate? For these sources, the number of allowances

added to the budget should be the same as described under N.J.A.C. 7:27-31.4(j). Importantly, the total NO<sub>x</sub> inventory will not change, it will simply be accounted for under this program, which is highly desirable. {3}

RESPONSE: The Department agrees that applying the emission MOU reduction requirements to an opt-in source would tend to discourage large sources (such as direct fired combustion units) from opting into the NO<sub>x</sub> Budget Program. The Department wants to encourage any unit to make voluntary NO<sub>x</sub> emission reductions and obtain tradable emission credits to the extent that the voluntarily reduced emission rate is below what would otherwise be required. If a source is not subject to the NO<sub>x</sub> Budget Program then the MOU controls should not be placed on it regardless of the size of the source. The proposed language was derived an outdated provision in the Model Rule which states:

“The allowance allocation for an opt-in source that, by size, would otherwise be considered an affected facility, shall be equivalent to the OTC MOU emission reduction applied to baseline control period emissions, or the permitted allowable NO<sub>x</sub> emissions from the source, whichever is less.”

This provision was effectively removed from the model rule upon issuance of a white-paper “NESCAUM/MARAMA NO<sub>x</sub> Budget Model Rule: Opt-in provisions” that was part of the May 20, 1997 “Report of the OTC Stationary/Area Source Committee.” The second sentence of the third paragraph of the paper states: “sources that opt into the NO<sub>x</sub> Budget shall be allocated at their baseline activity and the lower of actual or permitted allowance emission rates.” The Department mistakenly crafted N.J.A.C. 7:27-31.4(i) based on language that was effectively no longer part of the model rule. All other states’ NO<sub>x</sub> Budget regulatory actions do not apply the OTC MOU emission control requirements to opt-in sources. Upon adoption, the Department is removing N.J.A.C. 7:27-31.4(i) and is removing all references to this provision. The Department is reserving the subsection for the purpose of retaining the citations of the remaining provisions in the section and, therefore, reduce the amount of citation changes to other provisions of the rule. The Department is also revising N.J.A.C. 7:27-31.4(j) to apply to all opt-in sources.

42. COMMENT: N.J.A.C. 7:27-31.4(n) should be revised so the Department provides information of opt-in sources to both the NATS Administrator as well as to EPA Region 2, similar to the provision at N.J.A.C. 7:27-31.12(p). {1}

RESPONSE: The Department has clarified this provision in order to indicate that opt-in information will also be sent to EPA, Region II.

43. COMMENT: At proposed N.J.A.C. 7:27-31.4(o)2, the word “case” should be added to the provisions to read: “the source has been replaced, in which case the replacement...”{8}

RESPONSE: Upon adoption, the Department has amended the definition as suggested.

44. COMMENT: A provision should be added at N.J.A.C. 7:27-31.4 to clarify that a source seeking to opt-in to the NO<sub>x</sub> Budget program will be allocated allowances for control periods subsequent to the source's approval as a Budget source. This may seem obvious, however an opt-in source may interpret provisions of N.J.A.C. 7:27-31.4 to mean that a source which opts-in to the program after 1999 will receive allocations for the control periods prior to the date of the source opt-in. {1}

RESPONSE: The Department has amended subsections (d) and (j) to clarify that allowances will not be created for opt-in sources for the years before the source will have been approved as an opt-in source.

45. COMMENT: N.J.A.C. 7:27-31.4 should clarify that an opt-in source wishing to receive early reduction credits for 1997 and/or 1998 must have been approved as an opt-in source and have submitted an application for early reduction credits by October 31, 1998. {1}

RESPONSE: N.J.A.C. 7:27-31.12 specifies that only budget sources may submit claims for early reductions and that all claims for early reductions must be submitted by October 31, 1998. Therefore, if an opt-in source wishes to receive early reduction credits for 1997 and/or 1998, it must have been approved as an opt-in source and have submitted an application for early reduction credits by October 31, 1998. Since the provisions relating to early reductions already specify this condition and since the Department does not expect such a situation to occur, no change to the rule is being made upon adoption with respect to this comment.

#### N.J.A.C. 7:27-31.5 Interface with the emission offset program

46. COMMENT: Proposed N.J.A.C. 7:27-31.5 creates a severe disincentive to generating creditable emission reductions, and is detrimental to needed economic growth in the State of New Jersey. Under the proposed rule, if a budget source provides emissions offsets to a non-budget source, the non-budget source would have to opt-in to the NO<sub>x</sub> Budget Program to avoid having allowances taken away from the budget source's account. This approach, if carried over into the final rule, effectively would eliminate any offset transactions between budget and non-budget sources. It is extremely unlikely that any non-budget source would opt-in to the NO<sub>x</sub> Budget Program, given its complex, confusing, and restrictive allocation methodology and its stringent monitoring, recordkeeping, and reporting requirements. Likewise, it is extremely unlikely that a budget source would provide offsets to a non-budget source that does not opt-in to the program, knowing that allowances will be deducted from the budget source's compliance account. Thus, the proposed rule virtually ensures that the largest NO<sub>x</sub> emission sources in the State (i.e. budget sources), which are also the sources most likely to have offsets available or the ability to generate creditable emission reductions in appreciable quantities, will not provide offsets to smaller sources. The end result is that non-budget sources will be forced to obtain offsets only from other non-budget sources. This will have an extremely adverse effect on both the availability and the price of offsets, because small non-budget sources will need to expend disproportionately more resources in order to achieve marginal reductions in NO<sub>x</sub> emissions than would large budget sources. The overall effect of proposed N.J.A.C.

7:27-31.5, therefore, will be to inhibit economic expansion in the State. This is especially problematic because the annual emission threshold that triggers offset requirements in New Jersey, 25 tons per year (“tpy”), is so low. For example, a 115 million Btu per hour (“MMBtu/hr”) boiler (less than half the size of the 250 MMBtu/hr budget source threshold) that is permitted to burn natural gas at a stringent NO<sub>x</sub> emission limit of 0.05 lb/MMBtu for 8760 hr/yr has a potential to emit (“PTE”) of 25 tpy. This illustrates that it is not difficult for relatively small sources to trigger emission offset requirements. Proposed N.J.A.C. 7:27-31.5 also raises some technical issues. For example, it is unclear how the allowances would be deducted from a budget source’s account. Normally, the use of offsets requires only a one-time purchase. Will the deduction of allowances occur only once? Also, offsets for NO<sub>x</sub> must be obtained at a minimum ratio of 1.3 to 1. When a non-budget source uses offsets at this ratio, which value does it report to the NO<sub>x</sub> Allowance Tracking System (“NATS”) Administrator? Which amount does the NATS Administrator deduct from the budget source’s allowance: the original amount of the excess emissions or the amount of offsets sold? PSE&G believes that deducting allowances based on the amount of offsets sold further penalizes the budget source. It is also unclear how the use of offsets would be handled between budget and non-budget sources within the same company. For example, if a company with budget sources wants to install several small boilers for heating (e.g. 20 to 50 MMBtu/hr) at a company site that is currently not affected by the NO<sub>x</sub> Budget Program, and the emissions from these boilers trigger the Emission Offset Rule (N.J.A.C. 7:27-18), does the Department intend for the company to have to opt these boilers into the program in order to provide them with offsets? PSE&G believes that the rule should not place such a restriction on the intra-company use of offsets. In addition, how does the Department intend to handle interstate offset transactions? The Emission Offset Rule does not preclude interstate offset transactions. Will out-of-state non-budget sources be forced to opt-in to the New Jersey NO<sub>x</sub> Budget Program in order to prevent the deduction of allowances from their budget sources? If so, how would the Department enforce this deduction? If not, this creates an inequity between intrastate and interstate offset transactions. Furthermore, operation of new or modified non-budget sources is unlikely to appreciably displace operation of budget sources. Also, any new sources subject to the Emission Offset Program will be subject to extremely stringent Lowest Achievable Emission Rate (“LAER”) levels of NO<sub>x</sub> control. Therefore, PSE&G believes that double-counting between offsets and allowances will not be problematic. In summary, in the final rule, the Department should remove the provision that would deduct allowances for offset transactions between budget and non-budget sources. {14}

RESPONSE: This allowance adjustment is being applied throughout the OTC and is a necessary part of the program. The adjustment of allowances when Emission Reduction Credits (ERCs) or Emission Offsets are transferred from a NO<sub>x</sub> Budget source to a source that is not a budget source. Without this adjustment, there would be an increase in the total amount of NO<sub>x</sub> emissions allowed to be emitted from both budget sources and the sources receiving the ERCs. The Department would amend this provision as applicable if any activity under the revisions to the New Source Review Regulations would precipitate the need or ability to change this policy. The Department would also amend this provision, which is common to all States’ NO<sub>x</sub> Budget Rules, if the States participating in the NO<sub>x</sub> Budget Program agree that it is not needed after further examination.

The following statements provide additional clarification regarding such allowance adjustment. The allowance adjustment would need to be made each year for which the emission offsets or ERCs apply. Intracompany offset transactions from budget sources to non-Budget sources would need to be addressed in the same manner. For the purpose of calculating the number of allowances to be adjusted, offset ratios would not be included. The allowance adjustment would be calculated based on the number of tons of emission reductions associated with the ERC generating source during the May 1 through September 30 period.

47. COMMENT: Proposed N.J.A.C. 7:27-31.5(c) mentions non-budget sources opting into the Program, but does not explain how this opt-in is to occur. Presumably, the non-budget source would opt-in using the procedures in N.J.A.C. 7:27-31.4; however, the proposed rule is not clear in this respect. Also, proposed N.J.A.C. 7:27-31.4(d) states that the Department will increase New Jersey's emissions budget to make allowances available for an opt-in source. However, proposed N.J.A.C. 7:27-31.5(b) states that allowances for new or modified sources will be drawn from the existing budget and that this budget shall not be increased. If the Department insists on requiring opt-in of non-budget sources to avoid allowance deductions from budget sources, then the New Jersey budget must be increased to accommodate non-budget sources that opt-in to obtain offsets. {14}

RESPONSE: The commenter is correct in that any source that opts into the NO<sub>x</sub> Budget Program must opt-in pursuant to N.J.A.C. 7:27-31.4. The commenter is also correct in that as mentioned at N.J.A.C. 7:27-31.4(d) allowances are created to accommodate a non-budget source that has complied with the opt-in procedures. The provision at N.J.A.C. 7:27-31.5(b) does not override these opt-in provisions. The provision does emphasize that the budget is a cap on emissions from all new and existing sources that are required to be part of the NO<sub>x</sub> Budget Program and no additional allowances will be created to accommodate any new sources that are required to be part of the NO<sub>x</sub> Budget Program (i.e. non-opt-in sources).

48. COMMENT: At N.J.A.C. 7:27-31.5, if ERCs are transferred between budget sources then allowances from the providing source compliance account should be shifted at a level that equals the ozone season ERCs to the receiving source. {3}

RESPONSE: In the case where emission offsets are transferred from one budget source to another, the budget does not need adjustment. In such a situation, the companies involved in the ERC transaction would have the opportunity to negotiate the trading of any allowances in conjunction with the transfer of emission offsets or as a separate transaction. Otherwise, allowances would be allocated pursuant to N.J.A.C. 7:27-31.7, which automatically adjusts allowance allocation based on the activity of each budget source, or pursuant to the appropriate State's authority to allocate allowances.

49. COMMENT: At N.J.A.C. 7:27-31.5(c), if offsets are sold by a budget source to a non-budget source, an equivalent number of allowances should be retired. Any sale of offsets by a budget source to either a budget or a non-budget source should result in an equivalent number



of allowances being permanently removed from the budget allocation process from the source selling the offsets during all phases of the allocation process, including the historical allocation phase if applicable. {7}

RESPONSE: As mentioned in the response to comment #48, no adjustment to the NO<sub>x</sub> Budget needs to occur when emission offsets (ERCs) are transferred from a budget source to another budget source. The response to comment #46 clarifies the procedures regarding adjustment to the NO<sub>x</sub> Budget when emission offsets or ERCs are transferred from a budget source to a non-budget source.

N.J.A.C. 7:27-31.6    Interface with the open market emissions trading program

50. COMMENT: The Department received comments from three entities recommending the establishment of a less restrictive interface between the NO<sub>x</sub> Budget Program and the New Jersey Open Market Emission Trading (OMET) Program at N.J.A.C. 7:27-30:

PSE&G strongly urges the Department to step forward and be a leader in the advancement of market-based approaches to emissions reduction by providing an interface between the NO<sub>x</sub> Budget and OMET Programs in the final rule. Proposed N.J.A.C. 7:27-31.6 indicates that NO<sub>x</sub> emission reductions made by budget sources may not be used as the basis for Discrete Emission Reductions (DERs), and that DERs may not be converted to allowances under the NO<sub>x</sub> Budget Rule. This eliminates any interface between the OMET Program and the NO<sub>x</sub> Budget Program. PSE&G believes that New Jersey's NO<sub>x</sub> Budget Program should promote the use of the broadest range of market-based incentives to reduce NO<sub>x</sub> emissions. Therefore, we were extremely disappointed to find that the Department chose to allow absolutely no interface between the NO<sub>x</sub> Budget and OMET Programs. This situation is made even more disturbing by the fact that, in the preamble, the Department provides no explanation for its action. {14}

We believe that the Department's concerns about providing an interface between the two programs are largely unfounded, and that eliminating NO<sub>x</sub> budget sources from open market emissions trading will sound the death knell for the OMET program, a program whose viability as an incentive-based compliance instrument has already been proven. PSE&G believes that an interface must be established between the two programs. This interface should allow a NO<sub>x</sub> budget source that reduces its NO<sub>x</sub> emissions the option to claim a DER and retire a corresponding allowance. The Department must provide an interface and adopt the recommendations developed by the OMET Design Team. {14}

An April 1997 discussion paper (entitled "Recommendation on the Presence of an Interface Between the NO<sub>x</sub> Budget Program and New Jersey's Open Market Emission Trading Rule") was prepared by the Intersystem Subgroup of the OMET Design Team. This paper has been presented to the Department and the OTC on several occasions. In fact, the Department provided an earlier draft to the OTC in August 1996. The paper cogently outlines the principles for an interface between the two programs, and dispels the concerns about providing such an interface. {14}

Without this interface, NO<sub>x</sub> budget sources in New Jersey are effectively blocked from participating in open market emissions trading. NO<sub>x</sub> budget sources are the largest NO<sub>x</sub> sources in the state. In many instances, they are also the sources most able to make cost-effective NO<sub>x</sub>

emission reductions. Non-budget sources, comprised primarily of the state's vital small business sector, may be forced to decide between installing cost-prohibitive control technologies, relocating, or making themselves dependent on out-of-State emission reductions. {14}

PSE&G also notes that certain provisions in New Jersey's air pollution control regulations require budget sources to utilize DERs. For example, the Maximum Emergency Generation ("MEG") provisions in the NO<sub>x</sub> RACT Rule, specifically N.J.A.C. 7:27-19.24, require compensation with DERs for any excess NO<sub>x</sub> emissions that may occur when units are forced to operate at emergency capacity to satisfy electric demand. As proposed, budget sources would no longer be able to generate their own DERs or obtain DERs from other budget sources to provide such compensation. {14}

This section sets forth restrictions to an interface with the Open Market Emissions Trading (OMET) Program, and is probably misnamed. An OMET workgroup made extensive and detailed recommendations to the Department regarding an interface and the benefits of such an interface including: 1) allowing budget sources which are DER generators to continue supplying smaller sources outside the budget with credits needed for compliance, 2) allowing sources outside of the budget to participate in the emission reduction process, with the budget being a driving force, where opt-in requirements might deter or not be applicable, thus encouraging additional emission reductions, and 3) allowing budget sources using DERs to comply with RACT to account for their emissions relative to rate, in addition to accounting for tons under the budget, without being penalized, relative to other budget sources, for using this method of RACT compliance. The Department is encouraged to seek approval from the OTC states for an interface. It is the most logical way to continue both programs and ultimately the route to the most beneficial situation overall. The effects on non-budget sources, and the overall OMET program cannot be avoided without an interface. {8}

Without addressing the OMET workgroups comments and establishing a true interface, there will be very little left of the Department's open market program. The reason for this is that the major players within the open market system, both generators and users, are now being drawn away from OMET and into the budget system. Because the proposed budget rule totally disallows DER generation by budget sources during budget control periods, the linchpin of the open market trading process, generation of DERs by larger sources, is lost. {8}

Under the proposed NO<sub>x</sub> Budget restrictions, OMET participants will face the following situation: 1) non-budget sources using DER credits for RACT compliance will no longer have a ready supply to remain in compliance, and 2) non-budget sources which might have ways to reduce NO<sub>x</sub> will not have a large market into which they could sell DER credits generated. While the above two types of sources could theoretically sell to each other, the numbers of credits involved would be so low as to not support a viable program. The end result, therefore, would be that the benefits of trading, the economic efficiencies and incentives to reduce, would be lost for these sources. {8}

Budget sources will not be able to trade amongst themselves to meet RACT. This situation most directly impacts DER users, who will be facing the same short supply as the non-budget sources. For sources who comply with RACT limits through Alternative Emission Limits (AELs), there is now a requirement to obtain and use DERs. An inadequate DER supply may force budget sources with AELs to either do something to reduce or shut down. Even if DERs are available, they will be very costly, and budget sources using them will end up paying twice for the same emissions, once as DERs, and again as budget allowances. In the absence

of the interface, however, there may be other ways to avoid the penalty described above to budget sources using DERs. Other states have allowed NO<sub>x</sub> RACT requirements to be superseded by the NO<sub>x</sub> Budget. Although it at first sounds like the RACT standards would be lost, because the NO<sub>x</sub> budget trading process centers around compliance with an average emission rate which is much less than the RACT limits, budget sources complying with the budget are, in fact, conducting the same type of trading as that which occurs under the OMET rule (NO<sub>x</sub> allowances sold represent reductions at budget sources). It is not, therefore, an unreasonable option to consider. If this is not acceptable to the Department, then perhaps there is a way that budget sources could account for the type of trading conducted under OMET as a sort of a subset within the budget. {8}

Please delineate the concerns that the Department has with respect to the interface this NO<sub>x</sub> Budget Program has with the Open Market Emission Trading Program. What is the economic impact or environmental impact type studies done as to the consequences of the absence of an interface with the Open Market Emissions Trading Program? Will such absence be curtailing a potential source of credits both into and an outlet market wide for credits from discrete emissions trading program? Based on those two sort of domains, could you expand upon the mechanism by which the interface was, in fact, determined to be a non-active interface between these two programs? What was the thought process and prioritization that went into resolving this as being the best alternative, that alternative being the absence of NO<sub>x</sub> creation during the ozone season by the big players and NO<sub>x</sub> generation or what is currently seen as the big players for the open market and the potential economic hardship on small NO<sub>x</sub> consumers and credits. {12}

The NO<sub>x</sub> Budget Program and the Open Market Emission Trading Program (N.J.A.C. 7:27-30) are not interfaced which will cause confusion and conflicts. There is currently an Open Market Trading Program in place in New Jersey that has been touted as the premier NO<sub>x</sub> trading program in the country. The proposed NO<sub>x</sub> allowance scheme in the NO<sub>x</sub> Budget Rule does not encourage the use of the NO<sub>x</sub> Open Market Trading Rule. A coordinated rule and system needs to be developed between these two NO<sub>x</sub> emission tracking and trading rules. An interface between the two programs will ensure that both programs fulfill their required agenda and ensure that neither program will conflict with the other, contributing to the detriment of each. {5}

RESPONSE: New Jersey is in the unique position of participating in both the NO<sub>x</sub> Budget Program and an Open Market Emissions Trading Program. The Department intends to propose amendments to these rules in the near future in order to allow a one-way interface whereby a budget source could generate DERs pursuant to N.J.A.C. 7:27-30 provided that a commensurate quantity of allowances are retired by the budget source. The Department notes that a Blue Ribbon Panel has recommended, in a report to the Commissioner, the establishment of at least such a one-way interface.

The Department is aware that members of the OMET Program's Advisory Group, as well as this commenter, have recommended the creation of a two-way interface. Neither the OTC NO<sub>x</sub> Budget MOU nor the NESCAUM/MARAMA model rule address such an interface. Because the NO<sub>x</sub> Budget Program is a multi-state program and because a two-way interface could be deemed by some to possibly have an impact on other states, the Department would want to confer with the other states and seek their acceptance before proceeding with a two-way interface. The Department has raised the issue at an OTC Stationary and Area Source

Committee meeting. However, at present, there are a number of other pressing matters on the Committee's agenda. In any case, the Department intends to continue encouraging consideration of this matter.

The Department appreciates the detail provided regarding the establishment of an interface and regarding specific interface scenarios. The Department recognizes the significance of NO<sub>x</sub> Budget Sources in the generation of DERs in the OMET Program.

One of the commenter's statement regarding the NO<sub>x</sub> Budget Program allowing the avoidance of RACT compliance in any State is inaccurate. The NO<sub>x</sub> Budget Model Rule states "Nothing in this regulation waives any NO<sub>x</sub> reduction requirement otherwise in effect, including compliance with regulations implementing Reasonable Available Control Technology..." New Jersey's rule and other States' rules and proposals all contain similar provisions. A budget source must comply with the NO<sub>x</sub> Budget Program as well as all other emission limits established through rule or permit conditions. Therefore, a budget source that complies with RACT rules through the establishment of alternative emission limits and the associated required use of DERs must continue to do so in addition to obtaining the appropriate number of allowances authorizing NO<sub>x</sub> emissions during the control period for the purpose of the NO<sub>x</sub> Budget compliance. Complying with both the NO<sub>x</sub> Budget Program and the NO<sub>x</sub> RACT requirements is also required in the case where a budget source is operating under a "MEG alert" scenario.

51. COMMENT: At N.J.A.C. 7:27-31.6(c), allowances should not be retired by the NATS Administrator when an electric consumer elects to receive DER credits instead of allowances. {7}

RESPONSE: This provision is necessary to prevent the two systems from crediting the same emission reduction strategy twice (i.e. avoidance of allowance use and generation of Discrete Emission Reduction (DER) credit). If the Department did not prohibit such double crediting, it would be counter to the emission reduction goals of the NO<sub>x</sub> Budget Program and the goal of the OMET Program to do no harm to the environment.

N.J.A.C. 7:27-31.7 Annual allowance allocation - general comments

52. COMMENT: The Department received comments supporting the principles of the proposed allowance allocation methodology:

If there is a general theme embodied in this rule, I think it is that those who are less clean should be given an incentive to clean up or buy allowances from others who clean up, and those who are clean should stay clean or get cleaner. We are supportive of this concept and believe it sends the right signal to all the participants in the program. {9}

In general, MPLP favors the basic principles contained in the proposed rule. The proposed rule favors the ability of "clean burning" plants to, under certain circumstances, receive the credits necessary to continue operation into the future. {18}

Regarding N.J.A.C. 7:27-31.7(a) - (c): the initial allocation procedure detailed in the rule probably does not make any of the stakeholders totally happy, and the details may not be as perfect as they could be, but overall, the procedure is both workable and relatively fair. Aspects

of the procedure which are very positive are that 1) allocations, both the ‘actual’ and ‘historic’ portions, are based on target emission rates, and not actual emissions, and 2) the annual re-allocation process, though complicated, is self-correcting and progressive, removing any arbitrary advantage or disadvantage to an individual source that a system based on a fixed historic operating period would permanently set. {8}

SYCOM Enterprises would like to congratulate the Department on the NO<sub>x</sub> Budget Rule Proposal, a progressive proposal that facilitates measurable protection of the environment at the least cost to affected sources. This rule will stand as a model for every state that is required by the Clean Air Act (CAA) to reduce pollution from Oxides of Nitrogen (NO<sub>x</sub>). It will also stand as a model for future limits and trading for Carbon Dioxide (CO<sub>2</sub>) and other Greenhouse Gases. Most of earlier “cap and trade” rules from other regions, and even the NO<sub>x</sub> Budget Model Rule itself as implemented in other states, contain provisions that reward historical high polluters and punish entities that are environmentally proactive. If allocation of NO<sub>x</sub> allowances is done on a strictly historical basis, those companies that have polluted most in the baseline years will get the largest allocation. Those who were proactive and cleaned up their operations prior to the baseline year are punished in most other systems by being given a small allocation. The New Jersey regulators, however, have found ways to encourage greater utilization from clean sources and give proportionally smaller allocation on the basis of historical utilization alone. This sends the powerful signal that those companies thrive which are most environmentally progressive, not the reverse. It is unfortunate that the Department was not able to go to a “Generation Performance Standard” approach that would have rewarded allowances purely on the basis of the current emissions as a function of electric or BTU output. Such a system gives a clear and definite signal that cleanest generation will fare the best. This was not possible, given the existing constructs of the OTC NO<sub>x</sub> Budget Model Rule and the political expectations set up throughout the northeast states by this approach. Within the guidelines of the Model Rule and the Memorandum of Understanding signed by the northeast states, however, the New Jersey approach, as described in this Rule proposal, is excellent. {4}

RESPONSE: The Department acknowledges the support for the principles of the proposed allocation methodology. The Department recognizes the extraordinary effort invested by all of the participants during the allocation development process. It is through this effort that the Department was able to propose such a system. The Department proposed this allocation method to be both environmentally sound and as fair as possible to all interests.

53. COMMENT: The Department received several comments suggesting to allocate allowances based on a simple, fixed table:

PSE&G believes that the inherent complexity of the proposed allocation methods for both 1999 and 2003 may impede the success of New Jersey’s NO<sub>x</sub> Budget Program. There are many factors that contribute to this complexity. Among other things, these methods rely on a tremendous amount of emission and operating data from all affected sources. Each source’s allocation is highly dependent upon the allocations of all other affected sources, and could vary significantly from year to year. The data preparation and processing required, including the processing of claims from various allowance reserves, impose an unnecessarily heavy administrative burden on both the Department and affected sources. These factors introduce enormous uncertainties into a company’s ability to plan its ozone season operations and

compliance strategies. These uncertainties severely limit the ability of New Jersey companies to comply with the rule in a cost-effective manner and participate with any foresight in the regional allowance trading market. In short, despite the substantial amount of effort that went into developing the allocation concepts embodied in the proposed rule, we are concerned that the proposed allocation methods are so complex and cumbersome that they may prove to be impractical or unworkable in the long run. As a solution to these complexities and uncertainties and their potential consequences, we propose that the 1999-2002 allocation method use a fixed allocation based on the provisions outlined in the OTC MOU, with appropriate set-asides for growth and energy conservation activities. In fact, in April and August 1996, PSE&G presented proposals to the Department which were based on a fixed allocation. {14}

The 1999-2002 allowance allocation should be fixed. This would allow companies, like Atlantic, to meet the OTC MOU reductions since the reduction targets (Allocations) will be known in advance. Under the rule, it will be extremely difficult, if not impossible, for affected sources to plan for compliance because allocations will not be known until early 1999 and will change every year thereafter. We do not believe that the Department understands the burden and complexity of the planning required to implement the proposed rule. During the meetings of the NO<sub>x</sub> Budget Workgroup (1995, 1996 and 1997), the Department continually stated that the final rule should reduce the burden to the Department. When Atlantic Electric proposed a rolling average allocation, the Department objected because it solely was concerned with the additional workload. Yet, in this proposal, the Department has managed to create one of the most complex air regulations ever proposed. First, the Department will have to create a base line every year based on the previous three years worth of data, only two will be deemed as acceptable. Second, the Department will have to deal with set-asides for new sources, DSM, Ramp-ups, etc. Third, the Department will have to allocate an amount of allowances to each affected source based on the source's permit limit or some fixed number. Fourth, the Department will have to give historical sources an additional allocation. And this will be done every year, and the first allocation will not be known until 1999. Atlantic finds this unacceptable. The system will be extremely labor intensive on both the Department and the regulated community at a time of deregulation and, for the utilities, cost cutting. The system will be open to manipulation due to the complexity of the calculating and reporting mechanisms. Atlantic strongly recommends that the Department make the allocation fixed, along the lines of the SO<sub>2</sub> program, in order to increase planning certainty, to increase trading, to foster resources needed, and finally to avoid abuses.{5}

The allocations for 1999 need to be known in early 1998. Otherwise, achievability will be difficult under the proposed allowance allocation system since allocations will not be known in a timely manner, therefore trading in New Jersey will not happen in 1999. Trading between New Jersey sources will be practically non-existent in 1999, the first year of required compliance. Due to the extremely complicated method of establishing NO<sub>x</sub> allocations in the rule, New Jersey sources will not know their allocation until, possibly, April 1999. This methodology effectively rules out trading (from New Jersey sources) as a method of compliance for 1999. How can a New Jersey source sell or buy allowances? New Jersey sources will not have allowances to sell and sources needing to buy will not know how many allowances they need. Again, this is an unacceptable way for New Jersey sources to operate and will put them at a disadvantage in a deregulated environment. Once again, Atlantic Electric strongly emphasizes that the allocation be fixed and be known well in advance.{5}

This rule is one of the most complicated rules we have ever attempted to analyze and understand the effects and implications. Due to the multitude of formulas and information necessary to complete the allowance allocation equations, it is virtually impossible to ascertain the effects on the operation of specific units. Consequently, the allocation procedures makes it difficult, if not impossible, to plan operations during an ozone season to assure adequate allocations at the end of an ozone season. While this rule may be an attempt to craft a compromise among a variety of stakeholders, it will make it even more difficult for companies to generate electricity in the state of New Jersey. Quite simply, by making it so difficult to comply, even with Phase II of the OTC's NO<sub>x</sub> Memorandum of Understanding (OTC/MOU), the Department is making operations in New Jersey more difficult and costly than necessary to achieve the desired emission reduction goal. {3}

It is our recommendation to develop a system with a known, certain forward looking allocation and allow the market to drive efficiencies. Competition in a market based system will drive down cost as opposed to a bureaucratically based system which will increase cost. If in the future it is demonstrated that some number of allowances are needed for some purpose adjust the allocations then. Allocation of allowances to reserves to address contingencies simply increases costs on a speculative basis. {3}

RESPONSE: The Department recognizes the complexities of the proposed allocation system. The Department is currently developing an automated system that will take the data and perform the allocation calculations. The Department will collect 1996, 1997 and 1998 data this year and use it as the input for the 1999 allocation. Each year thereafter, data collected through the quarterly Electronic Data Reports (EDRs) will be imported into the allocation calculations. The burden to the sources and to the Department was recognized during the allocation workgroup discussions. A fixed allocation system (which would probably be a simpler approach) was considered, but was not part of the consensus outcome of the allocation workgroup discussions. In the allocation system agreed on and included in the rule, the largest portion (probably 80 to 90 percent) of the allowances will be allocated to source accounts by April 1 before the control period. Only the remainder of the total budget will not be allocated until November 1.

54. COMMENT: The Department received several objections to the reserve accounts:

Since New Jersey is going beyond the OTC MOU by having set-asides, rewards, etc, Atlantic will have a difficult time meeting the unknown reduction targets for 1999. Allocations will be fluctuating from year to year due to rolling average methodology. Since trading is uncertain at this time, Atlantic will have a difficult time meeting the unknown target reductions which will not be known until the beginning of each ozone season. {5}

From all of the reserves and contingencies, it appears the Department has little or no faith in a market based system. In the attempt to develop and regulate a comprehensive regulation to address stakeholder contingencies, the proposed regulations establish a government controlled market which instead of resulting in lower costs, will most likely increase the cost of compliance. {3}

The proposed allocation methodology unfairly forces sources that were operational in 1990 to offset all emissions from (1) new sources which came on-line after 1990, (2) over-compliance credits associated with natural gas-fired facilities, and (3) an allocation of

incentive credits awarded for the use of environmentally beneficial technologies or for energy conservation efforts. The formula set forth at N.J.A.C. 7:27-31.7(b) and (c) contains a number of approaches which, if implemented as proposed, would result in much more stringent NO<sub>x</sub> reduction requirements during Phase II than those agreed to by the other OTR states and New Jersey in the OTC MOU. Such an approach could put New Jersey at a competitive disadvantage regionally and nationally by imposing requirements and restrictions upon New Jersey industry that would not be imposed upon out-of-state competitors. The proposed Phase II budget sets an even stricter NO<sub>x</sub> emissions cap (17,340 tons per ozone season) than the OTC Budget program. Unlike the OTC Model Budget Program, N.J.A.C. 7:27-31.7(c)3 and (c)4ii of the proposal takes credits away from stationary sources and awards them as incentive credits for natural gas-fired over-compliance, energy conservation programs or the use of environmentally beneficial technologies (i.e., landfill gas, fuel cells, solar, wind.) These deductions are in addition to the deductions taken from existing sources to offset all new major stationary source NO<sub>x</sub> emissions, pursuant to N.J.A.C. 7:27-31.7(c)1. Preliminary calculations by the Department estimate the total credits awarded annually at more than 2,600 tons of NO<sub>x</sub>, excluding any post-1995 sources. The additional 2,600 ton/year reduction in NO<sub>x</sub> allowance credits goes well beyond the intended requirements for Phase II of the MOU and will increase local energy generation costs by an estimated \$2.00 to \$2.50/MWh above the costs already projected for compliance with Phase II of the MOU (\$2.00 to \$5.30/MWh). These additional costs would likely be passed on to New Jersey businesses and power customers, making it more difficult to attract and maintain business in a manner that will allow the State to sustain economic growth. {16}

The allowance are impractical, risky, and create significant administrative and compliance planning problems for industry and for the Department. The proposed allowance allocation provisions relating to the allowance reserves create a planning and administrative nightmare for New Jersey industry by establishing a moving emissions target that changes each year and cannot be set until after the year is completed. The proposed allowance reserve provisions go beyond the requirements of the OTC MOU, increasing compliance costs. In addition, the methodology used to calculate credits is impractical and impose unjustified business risks. The Department should modify its allocation system to provide more certainty and mitigate the administrative burdens. Only at the end of the season will the Department have the required data to distribute the allowance reserves for new sources, increased existing source utilization and incentive credits. The resulting effect is to create a planning and administrative nightmare. No source can reasonably or efficiently be expected to develop a compliance plan if allowable emission levels are not known until after the ozone season is completed. In addition, since the reserves are likely to become increasingly more stringent with time, compliance plans will also continually change, which will further increase the costs of doing business in New Jersey. {16}

**RESPONSE:** The reserves are an integral part of the allocation strategy developed by the stakeholders group. The purpose of the reserves is to allocate allowances to NO<sub>x</sub> Budget Market participants on a “cleanest first” approach. The reserves were designed to encourage the use of clean energy production yet ensure that no windfalls of allowances are allocated. As mentioned in the previous response and in more detail in the responses to comments regarding the allocation system (N.J.A.C. 7:27-31.7), the amount of uncertainty companies will face is small since, the reserves hold only a small portion of the entire budget until after the control period; most of the allowances are allocated directly to source accounts before each control



period. There are other mechanisms for companies to increase the level of certainty, for example the banking of allowances and interstate trading. The reserves in the allocation system do not place a competitive disadvantage to New Jersey companies because all of the allowances are allocated to the market. The number of allowances specifies the emission target and is not altered by the use of the reserves.

55. COMMENT: One perception that comes across in reading the regulation is the conflict between the basic approach for allowance allocation and the overall State goal of aggressively pursuing the major sources of the problem. I am referring to efforts to “go after” the dirty sources such as the response to NJPIRG’S “Dirty Four” campaign and the actions with regard to OTAG emissions. In this regulation there are clear examples of bias toward providing economic advantage to less environmentally efficient sources. A simple example is the initial allocation to “not new sources.” Those that have actual emissions greater than 0.15 lb/MMBtu receive an allowance based on 0.15 times actual heat input. Those that have actual emissions below 0.15 get less than 0.15 times actual heat input (They are limited to the product of average heat input times the average of actual emission rate and the lesser of allowable emission rate and the lesser of allowable emission rate or 0.15). This is a clear message that “clean” sources are, for whatever reason, not valued equally with “dirty” sources. {18}

RESPONSE: The Department has developed the allocation method in order to almost certainly fully allocate “clean” sources, while not providing a windfall to such sources. fairness and consistency with new source rules are reasons that sources with emission rates of less than 0.15 #/MMBtu are not allocated allowances at the 0.15#/MMBtu rate.

56. COMMENT: New sources should buy allowances based on geographic location. Sources should not get rewards (extra allowances) for emitting under some arbitrary number (such as 0.15 lbs./mmbtu), unless they are in a geographic location (based on scientific modeling) which does not impact OTC exceedances. If, for example, a new source is located in Cape May County near B. L. England Station, then it will probably have little or no impact on ozone exceedances in the state or any OTC state and should therefore get allowances. If, however, a new source is located in the “Amtrak Corridor”, no matter what type of controls the new source has installed, it will have a significant impact on ozone exceedances and should therefore have to purchase allowances. The reasoning for this type of impact is simple. The new source in the Amtrak Corridor could reduce the allowances available to a station, such as B. L. England. Therefore, electrical production would be limited from B. L. England in order to satisfy the rule, yet the new source would definitely contribute and have a negative air quality impact, affecting the citizens in the state. This makes little sense since B. L. England’s emissions would not increase ozone exceedances, yet it may have to reduce operations, in order to allow a source which impacts ozone exceedances to increase output(up to 100 percent plus the new source may receive free “clean award” allowances to sell) Atlantic hopes that the State is looking for ways to actually reduce ozone and not just make a rule that looks good on paper in the so called name of rewarding “cleaner sources”. {5}

RESPONSE: The allocation of allowances based on geography is an interesting concept. However, the Department has not proposed such action and is not in the position to adopt such a radical change from the proposed allocation methodology. Additionally, with the presence of a free interstate trading system, the allowances allocated to a source do not determine the allowable emissions of the source because any particular source may buy or sell allowances. Even though a source is located in Cape May, its NO<sub>x</sub> emissions can have an impact on ozone concentrations in New Jersey and the other OTC states under certain meteorological conditions. The meteorological conditions of concern would include low-level winds (up to 500 meters above the ground) from a southwesterly direction or a sea-breeze circulation along the coastline. Available data indicates these meteorological conditions are not unusual during high ozone events in New Jersey.

N.J.A.C. 7:27-31.7 Annual allowance allocation - PHASE II comments

57. COMMENT: At N.J.A.C. 7:27-31.7, references to and description of terms such as E1, E2, H1 and H2 are repeated several times. Consolidating the definition of fixed terms would help to simplify the regulation and make it more readable. {18}

RESPONSE: The Department has crafted this section to reduce the amount of cross referencing of terms and equations.

58. COMMENT: Proposed N.J.A.C. 7:27-31.7(b) and (d) indicate that the Department will allocate allowances “Prior to the control period....” However, the Department does not establish a definitive date by which the allowances will be allocated. For planning purposes, it is crucial for sources to know how many allowances they will receive as far in advance as possible. Proposed N.J.A.C. 7:27-31.7(b) and (d) leave open the possibility, however, that sources will receive their allocations as late as the day before the control period begins. PSE&G believes that the Department must establish a reasonable deadline by which allowances will be allocated. This deadline should be no later than April 1 of each year, which is one month prior to the start of the control period, and one month after the March 1 deadline in N.J.A.C. 7:27-31.10(c) by which the NATS Administrator will determine the “progressive flow control” requirements for allowance banking. {14}

RESPONSE: The Department agrees that April 1 is a reasonable deadline for allocation of allowances pursuant to (b) and (d) and has accordingly amended the provisions.

59. COMMENT: At N.J.A.C. 7:27-31.7(b)1, if more than one fuel is allowed to be used the allowable emission rate is defined to be the weighted average of the allowable emission rates for each fuel type. What will be the basis for the weighting? This weighing should be based upon the maximum permitted consumption of the fuel with the highest emission rate. {7}

At N.J.A.C. 7:27-31.7(b)1, under the description of ‘allowable emission rate’, more detail should be given as to how the weighted average, with regard to the use of multiple fuels, is calculated. Perhaps a definition would be useful in this regard. {8}

RESPONSE: The Department is clarifying the basis for weighting the allowable emission rate specified at N.J.A.C. 7:27-31.7(b)1. The commenter properly identified the intended weighting basis -- the maximum allowable consumption of the fuel associated with the highest allowable NO<sub>x</sub> emission rate.

60. COMMENT: Proposed N.J.A.C. 7:27-31.7(b)1 contains the method for determining the number of allowances to be set aside for the New Source Reserve prior to the control period. Proposed N.J.A.C. 7:27-31.7(c)1 contains the method for determining how many allowances are actually allocated to these new sources in the end-of-season reconciliation. As proposed, new sources may calculate their set-aside allowances on the basis of their “allowable emission rates.” Although it is unlikely, it is nevertheless possible that a new source may be permitted at an allowable emission rate above 0.15 lb/MMBtu. Setting aside allowances for such sources is inconsistent with the restriction placed on existing sources. PSE&G feels that a 0.15 lb/MMBtu restriction should be used when calculating the New Source Reserve set-aside, as well as when determining how many allowances are actually allocated to new sources. In other words, allowances should not be set-aside for new sources for the portion of their allowable emission rates that exceed 0.15 lb/MMBtu, and allowances should not be allocated to new sources for the portion of their actual emission rates that exceed 0.15 lb/MMBtu. The respective equations for both the set-aside allocation method in N.J.A.C. 7:27-31.7(b)1 and the actual allocation method in N.J.A.C. 7:27-31.7(c)1 should be revised accordingly. {14}

RESPONSE: The Department agrees that it is unlikely that a new source would be permitted to emit NO<sub>x</sub> at a rate greater than 0.15 #/MMBtu in the context of requirements outside of the NO<sub>x</sub> Budget Program. The Department also agrees that it was never the intent to allocate allowances to new sources at a higher level than existing sources. The Department has therefore made the intention explicit by altering the provisions at N.J.A.C. 7:27-31.7(b)1 and (c)1 in order to prevent allocating allowances to a new source at a level greater than 0.15#/MMBtu. The Department has also clarified the provisions at (d)1 and (e)1 in a similar manner.

The following example clarifies how the Department would allocate allowances into the new source reserve, taking into account the issues presented in the comments regarding this provision. For example, a new 250 MMBtu/hr boiler is permitted to burn oil at a maximum consumption of 500 hours anytime in the calendar year at an allowable NO<sub>x</sub> emission rate of 0.20#/MMBtu and is permitted to burn natural gas with no consumption restriction at an allowable emission rate of 0.05#/MMBtu. The total of 29 allowances would be allocated to the new source reserve (instead of 32 without the 0.15#/MMBtu maximum). The weighted average of the allowable emission rate in accordance with N.J.A.C. 7:27-31.7(b)1 would be approximately 15.90 #/hr and is calculated as follows:

$$\frac{\left( 0.15 \frac{\#}{\text{MMBtu}} \times 500 \frac{\text{hr}}{\text{yr}} \times 250 \frac{\text{MMBtu}}{\text{hr}} \right)_{\text{(oil)}} + \left( 0.05 \frac{\#}{\text{MMBtu}} \times 3172 \frac{\text{hr}}{\text{yr}} \times 250 \frac{\text{MMBtu}}{\text{hr}} \right)_{\text{(nat gas)}}}{3672 \text{ hr}}$$

61. COMMENT: N.J.A.C. 7:27-31.7(b)1 The proposed rule places no limitations on potential claims by new sources against the New Source Reserve, despite the fact that these claims would come from New Jersey's base emissions budget. As such, the New Source Reserve has the ability to draw unlimited allowances away from a limited budget. PSE&G feels strongly that the access of new sources to this limited budget cannot be kept open-ended indefinitely without placing existing sources at an increasing competitive disadvantage. Our position is corroborated by the proposed rules of other OTC states, whose new source provisions strike a reasoned balance between new development and existing industrial stability by placing annual limits on allocations to new sources. In the interest of regional consistency, the Department should consider a limit on the New Source Reserve. This limit could take the form of an annual ceiling on New Source allowances or a time limit on the New Source Reserve. {14}

RESPONSE: There is a time limit for which the new source reserve applies to any individual new source. Allowances associated with any particular new source are allocated into the new source reserve only for the first two years in which a new source operates. After the first two years of operation, allowances will not be allocated into the new source reserve and the source will not draw allowances from the reserve. This reserve exists only to allocate allowances to a new source for two years after which it will be allocated allowances as any other budget source. The new source reserve will only draw allowances from the base emission budget to the extent that any new budget sources are operating during their first two years.

62. COMMENT: Regarding calculation of  $ER_{NO_x}$ ,  $ER_{allowable}$ , and  $ER_{actual}$  at N.J.A.C. 7:27-31.7(b)2i, (b)3i, (b)4ii, (d)2i, (d)3i, (d)4i, (d)4ii: the use of the 'best 2 out of 3 years' concept, which is incorporated into many of the calculations to derive an appropriate heat input factor, is not appropriate for the designation of a source's  $NO_x$  emission rate.

$ER_{NO_x}$  is supposed to represent the actual emission rate of a source, as used to determine whether a source is 'clean' and therefore worthy of being a potential beneficiary of the growth reserve. Tying the emission rates which are used to calculate this factor to the two highest heat input years over the last three has no basis. Whether a source is 'clean' or not should not relate to periods of high operation, but should be representative of the way the source has most recently operated. If the  $ER_{NO_x}$  is to be an average of any two years, it should be the most recent two. Better yet, it should just be the overall emission rate during the most recent control period.

Leaving this section as is invites gaming and can end up being environmentally unsound. For example: 1) A source with seasonal reduction capabilities, where it might be cheaper to run without controls, could use this section to oscillate emission rates, benefiting from the growth reserve to offset higher emitting periods; 2) A source which makes a permanent reduction, but is forced to reduce operation because of higher costs, cannot even receive the benefit of the reserve because of previous years operations at higher rates. {8}

RESPONSE: The Department agrees that in some cases the two control periods with the highest heat input will not necessarily result in the lowest  $ER_{NO_x}$ . However, using the two control periods that result in the lowest  $ER_{NO_x}$  will not necessarily result in the best allowance allocation for a source. The Department proposed these provisions using the highest heat input with the presumption that, in most cases, the emission rate would be approximately the same

for the three previous years and the factor with the highest degree of variability would be the heat input. The Department recognizes a source may significantly reduce its emission rate (to a level below 0.15#/MMBtu) and concurrently reduce its activity. In such a case, under the proposed allocation system, the source would not be able to be allocated allowances in the manner applicable to sources with an ER<sub>NOx</sub> of 0.15#/MMBtu or less until after three years of operation at the reduced emission rate. This scenario does not seem likely, but if experience shows this to be a problem, the Department will propose appropriate revisions to the allocation formula.

63. COMMENT: The Department received several comments regarding how dispatchable units are allocated. These comments are relevant to the growth reserve provisions of the proposal:

The proposed mechanism for allocation NO<sub>x</sub> allowances has the potential of shorting dispatchable budget sources from the allowances needed to fulfill their contractual obligations. Although the proposed rule provides new, clean budget sources with a full NO<sub>x</sub> allocation for maximum allowable activity, it could require existing, clean dispatchable budget sources to purchase allowances to meet their contractual obligations. We believe this situation represents an oversight in the proposal given the exceptionally low NO<sub>x</sub> emission rates from “dispatchable” units and the complete lack of control over when such dispatch will occur. Even though the proposed rules provide for a Growth Reserve from which NO<sub>x</sub> allowances can be made available for distribution after the control period, we maintain that such distribution could fall short. We have attached our recommendations for addressing such short falls and believe that they represent an equitable solution to the problem. Under our proposal clean dispatchable budget sources with an emission rate of 0.15 pound Btu heat input or less would be provided a full allocation of NO<sub>x</sub> allowances by assuming operation at a maximum allowable activity rate. The distribution of these allowances would follow a formula similar to that established by the Department for new non-budgeted sources as found in Step 1 of the proposed regulations. Under our plan dispatchable units would also be required to return all unused allowances to the Department during the “End-of-season reconciliation”. Therefore, under this proposal a dispatchable unit will 1) obtain sufficient allowances to meet their contractual obligations and 2) will not receive financial benefit from being allocated more allowances than they can consume in a control period. NRGG believes that this proposal successfully eliminates penalizing well controlled dispatchable units without compromising the Department’s attempt to prescribe a regional cap and trade program for significantly reduction NO<sub>x</sub> emissions. {2}

The proposed allocation methodology also does not meet an intended purpose of guaranteeing clean, dispatchable sources the right to operate. Any marginal growth in the operation of a clean source will quickly overwhelm the small excess allocation obtained by the proposed allocation methodology for sources that operate at less than 0.15 lb/MMBtu. The source, then in deficit, must rely on the growth fund that only provides for actual emissions up to 15 percent growth. The source is, at this point, effectively excluded from participating in the market except as a buyer. Further, the need for this clean sources to have to go into the market to obtain sufficient allowances to continue operating is a real possibility under the present allocation scheme. For example: Carneys Point emissions based on 0.14 lb/MMBtu and 1996 heat input was 475 tons. Initial allocation would have been 492 tons. A mere 7 percent growth in Capacity Factor would eliminate the surplus making Carneys Point a debtor source. If CF

increased from 50 to 75 percent, a 100 ton deficit would result. The welfare provided by the Growth Fund allocation would be completely used up to make up this deficit. To accommodate any further growth Carneys Point would have to buy the credits from, and given gratis to, the 1990 baseline sources. As stated above, initial allocation for all sources should be based on 0.15 lb/MMBtu. The Growth Fund should be increased to guarantee full allocation to clean sources. This should be funded by allowances presently intended for return to the 1990 baseline sources as unused. {18}

A number of the power plants that are independent power producers operate on what is known as a must-run basis. That is their contracts with their customer electric utilities require them and allow them to generate without a dispatch signal from the utility and the utility buys what they generate. Other power plants are dispatchable; that is, they operate on an economic signal provided by the utility and the regional power pool as to when they ought to turn their facilities on or off and at what level of output they should perform. Those plants respond to an economic signal provided by the utility and are much more fully integrated into the utilities dispatched that they operate within. The concern we have is that the way the rule is composed it imposes some measure of risk on dispatchable facilities as to the amount of allowances they may get over the course of time. The Department has recognized some of the variability in the industry with your three-year rolling average choosing out the two highest points over the last two years. However, the industry is in a state of change, as other speakers have said, and there could be instances where the cleanest plants in this state would not get the allowances they need to operate because of increases in their capacity factor over the course of several years. This becomes particularly important at this point in time during utility industry restructuring because of the Board of Public Utilities in its restructuring process has urged IPPs and utilities to engage in negotiations to restructure agreements to bring greater economic benefits to consumers. One of the ways to bring those benefits about is to renegotiate contracts to provide for dispatchability. If this rule proposed today imposes additional risk, sufficient NO<sub>x</sub> allowances will not be allocated to dispatchable plants. It will be counter-productive to the efforts of the BPU to promote renegotiations on a voluntary basis between IPPs and utilities. {9}

Where we believe the hardship for MPLP arises is in the way the proposed rule further ratchets down NO<sub>x</sub> emissions for all facilities, this ratcheting occurring as a result of the reduction in New Jersey's allocation of NO<sub>x</sub> credits (more so especially with the Department's recent decision for reductions beyond that required under NESCAUM). Requiring that MPLP attempt to further reduce NO<sub>x</sub> emissions below 0.15 lb per mmBtu, a level which is unattainable at this site, would severely harm the fragile economic condition of the project. We would be forced to buy NO<sub>x</sub> credits in the marketplace. The price of these credits is currently unknown, but will most certainly be controlled by market forces, of which utilities and large facilities will influence significantly. Simply, MPLP may not be able to afford these credits. At that point, MPLP would have two options - run in violation, or shut down. MPLP will not run in violation of its permits, so the remaining option would be to shut down. Given the fact this project is a true Cogeneration project, providing significant benefit to a substantial third party (Crown Vantage) who currently employ 400 people, the option of shutting down does not seem reasonable. Further, it seems apparent that a vast majority of the attainable reduction in NO<sub>x</sub> emissions statewide will come from those sources with NO<sub>x</sub> emissions significantly higher than 0.15 lb per mmBtu. As such, it would seem appropriate to focus on those sources in order to realize the targeted statewide tonnage of NO<sub>x</sub> emissions. Therefore, our recommendation is to modify the proposed rule to state that any source which emits NO<sub>x</sub> emissions at a rate equal to

or less than 0.15 lbs per mmBTU will receive all of the NO<sub>x</sub> credits necessary to operate. This would include ensuring that any such source receives these credits, even if they are dispatchable type sources. We believe these sources should continue to receive these credits into the future, with no reduction in future years. In addition, we recommend modification of the incentive clause allowing source's emitting NO<sub>x</sub> below 0.15 lb per mmBtu to receive additional credits beyond that required for their actual operation. We believe the incentive should be proportional to the incremental decrease below their current NO<sub>x</sub> emission rate. This incentive would therefore only apply to those sources that voluntarily made changes to reduce NO<sub>x</sub> emissions when they otherwise would not be required to do so. The incentive clause in the current proposed rule provides sources already below the 0.15 lb per mmBtu NO<sub>x</sub> emission rate to receive incentive credits. We believe a true incentive would be for sources emitting NO<sub>x</sub> at or below 0.15 lb per mmBtu to voluntarily reduce emissions further - the incentive being the incremental NO<sub>x</sub> credits received for this effort. {13}

While IEPNJ recognized that the Department intends the proposed rule to fulfill the operating needs of dispatchable clean-burning electric generators, the rolling average method for allocation of allowances based on actual facility utilization may not fully recognize the contribution made by clean plants which are dispatchable. While the three-year rolling average for the actual utilization allocation may work well for base-loaded, must-run plants with predictable, stable utilization patterns, dispatchable plants with more variable utilization patterns may not be served well by an allocation based principally on a best two out of three-year rolling average. As a result, it is possible that a clean-burning facility may be denied the allowances it needs to run at full capacity simply because it was dispatched at a lower rate over the previous few years. As I discussed earlier, any disincentive for a clean-burning facility to operate at the highest possible capacity factor produces a perverse result, from both environmental and economic standpoints. We therefore propose an addition to the proposed rule which would assure that clean-burning facilities which are dispatchable not face a shortfall in allowances simply because of wide annual fluctuations in utilization; that is, clean-burning facilities which are dispatchable not face a shortfall in allowances simply because of wide annual fluctuations in utilization; that is, clean-burning dispatchable facilities should always receive enough allowances to fully cover their operations. In addition to the logic of environmental and economic efficiency, there is another compelling reason why the allocation methodology should assure that clean-burning facilities which are dispatchable receive all the allowances they require to cover their operations. This reason has to do with the restructuring of New Jersey's electric utilities have been encouraged by the New Jersey Board of Public Utilities to renegotiate their power purchase contracts with IPPs. The aim of these renegotiations is to achieve lower electricity costs for New Jersey consumers by renegotiating power purchase contracts in a manner that is mutually beneficial to both the purchasers (i.e., the public utilities) and the sellers (i.e., the IPPs). Often, such renegotiations involve switching from an arrangement where an IPP is based-loaded to one where the IPP is dispatchable, as the flexibility to the utility of a dispatchable arrangement can provide cost savings. However, based-loaded clean-burning IPPs will be hesitant to renegotiate to dispatchable contracts if they are less likely, as dispatchable facilities, to receive the allowances they require to operate. While IEPNJ recognizes the Department's efforts to assure that clean-burning dispatchable facilities receive all the allowances they require to operate, there are realistic scenarios in which such facilities could fall short to their needs. Following is a quantitative example of a scenario in which a dispatchable facility might fall short of its needs in a given year, even if it is a clean

facility: 1) The dispatchable facility's average emissions from the previous three years are only 30 percent of its potential to emit - for example, 30 tons out of 100. These emissions were at a rate slightly lower than the maximum permissible emission rate for the facility. Since the actual utilization allocation for clean facilities is based on an emission rate between its actual emission rate and its maximum permitted emission rate, the facility's actual utilization allocation covers slightly more than a 30 percent capacity factor. For purpose of this example, let us say that the actual utilization allocation covers 33 percent of its potential to emit. 2) The dispatchable facility is dispatched at a higher level during the current year, and as a result its emissions during the current year are 80 percent of its potential to emit, or 80 tons. 3) The dispatchable facility now has an allowance deficit of approximately 47 percent of its potential to emit, or 47 tons, and must turn to the growth reserve. 4) The same factors that caused the dispatchable facility to be heavily dispatched also caused many other facilities to be heavily dispatched. Therefore there is more demand for allowances from the growth reserve than there are allowances in the reserve. All claimants on the reserve have their claim on the reserve this year ratcheted down by 40 percent to accommodate the size of the reserve. 5) The dispatchable facility only receives 28.2 of the 47 tons it needs from the growth reserve, leaving it with  $33 + 28.2 = 61.2$  tons and a shortfall of almost 19 tons. As a result of the potential for clean-burning dispatchable facilities to experience a shortfall, the Department should modify its proposed rule to guarantee that such facilities are not left with an allowances shortfall at the end of the ozone season. {10}

Specific to GPU Genco operated units, while either 1996 or 1997 may compare to a 1990 through 1995 average generation, the allocation methodology does not account for variability in operations. In the case of most facilities, the year with the highest generation level in 1990 through 1995 is over two times greater than the highest annual generation in 1996 or 1997. This allocation methodology will severely punish companies which have reduced generation during future ozone seasons by increasing costs to obtain allowances. Recognizing an argument can be made that the "Growth Reserve" will account for these increases, it is GPU's belief that unit specific banking with no "Growth Reserve" allocation being withheld from baseline or budget sources is a more desirable approach. {3}

RESPONSE: The Department incorporated significant input from the work group on the growth reserve concept. Based on information gathered during the allocation development process, there is little risk that demand for allowances in the growth reserve would exceed the supply. Even in the unlikely event that the overall demand on the growth reserve is greater than the supply, the magnitude of the discount on the claims would most likely be minimal. The scenario mentioned in the comment in which growth allowances would be ratched down by 40 percent is unrealistic. For this severe scenario to occur, all of the sources with emission rates of 0.15 #/MMBtu or less would need to almost double operation in a single control period.

64. COMMENT: The Department received the following comments opposing the Incentive Allowance concept or suggesting limitation to the number of allowances to be allocated as Incentive allowances:

We are strongly opposed to the concept of awarding allowances to demand side management projects. They are not affected sources of the NO<sub>x</sub> Budget Program as established



by the Ozone Transport Commission. New Jersey would be placing an unfair burden upon its affected facilities and placing them in an unfavorable competitive situation versus out of state NO<sub>x</sub> Budget sources through implementation of an incentive Reserve for demand side management projects. {7}

The Incentive Reserve is a prime example of a reserve that will cause increased costs. Under this program, an individual or company can install an energy efficient or low emitting technology and receive allowances. Importantly, they are not sources otherwise affected under these regulations. These incentive allowances will cause additional control cost to the electric generator through the initial reserve allocation, plus the electric generator is now losing demand and revenues and ultimately, may have to buy the allowances back from the company which installed the technology if they are successful in developing a new customer to return to the previous demand level. These increased electric costs are not beneficial to either industries or residential customers in New Jersey. {3}

Reserve allocations such as DSM need to be limited in scope. Atlantic, in the spirit of cooperation, suggests that allocation for DSM be limited to no more than 50 tons. {5}

The Department should set aside a fixed number of allowances, two percent of the State allocation, in the Incentive Reserve. {18}

We want some sort of overall level of cap or control over the Incentive Reserve. {9}

There should be a limit on the annual size of the Incentive Reserve and on the claims made to this Reserve (for example 100 tons) {14}

The Department has proposed two options with regard to an Incentive Reserve: either a reserve of finite size will be set aside at the beginning of each ozone season, or alternatively there will be no reserve and the allowances for energy efficiency will be drawn out of the subsequent year's budget at the conclusion of each ozone season. Neither proposed option requires a firm limitation on the number of allowances. Without a firm limitation on the number of allowances for the Incentive Reserve, there may not be sufficient allowances to provide for electric generators. {6}

**RESPONSE:** The Department is retaining the Incentive Allowance concept upon adoption. This incentive allowance concept is an important component of the allocation system and is necessary as it relates to allocating allowances to demand side management projects.

Also, the allocation of incentive allowances are necessary due to the presence of the open market emission trading (OMET) program in New Jersey. Without such allocation (or retirement of allowances), a double counting of emission credits between the two programs would exist. The following hypothetical example illustrates how the allocation or retirement of allowances would prevent double counting of emission credits in the two programs:

A demand side management program improves the efficiency of energy consumption as a facility so that one ton of NO<sub>x</sub> worth of ozone season DERs would be generated in accordance to the OMET Program (N.J.A.C. 7:27-30). This action would both free up a NO<sub>x</sub> Budget Allowance in the NO<sub>x</sub> Budget Program and authorize the emission of an additional ton of NO<sub>x</sub> through use of the DER in the OMET Program. For every ton of NO<sub>x</sub> emissions saved under creditable energy efficiency projects, two additional tons of NO<sub>x</sub> allowed to be emitted beyond what would have otherwise have been allowed if the demand side management project were not conducted.

Therefore, there cannot be a cap of how many incentive allowances are drawn from the NO<sub>x</sub> Budget Program unless the Department simultaneously limits the amount of DERs that can be generated from projects than inherently free-up NO<sub>x</sub> Budget Allowances.

Also, the incentive allowance concept is beneficial for air quality because it encourages environmentally beneficial ways of providing energy in addition to conserving energy.

The Department expects that the amount of claims that will be submitted will not be sufficiently large to hinder the ability for budget sources to comply with the program.

65. COMMENT: Demand Side Management (DSM) are provided incentives through regulations of the Board of Public Utilities {7}

The New Jersey Board of Public Utilities (BPU) already has a program to promote demand side management programs. They pay these facilities investments two cents per kilowatt-hour when they undertake a measure of viable DSM activity. The market price today in the region energies is running around two cents per kilowatt hour. There is roughly a one hundred percent premium already received through the BPU rule currently in place to undertake activities. The add-on by the BPU was designed to capture environmental externalities; that is, the same benefits that the proposed rule is trying to capture. Those investments should not be paid twice for the same benefits. They should be paid once and they should choose which side of the street they want to take their benefit from. If the Department believes it is an appropriate incentive and the BPU believes their incentive is appropriate, then the DSM should choose one or the other. They should not receive both.{9}

DSM, or Energy Efficiency Projects, are, for the most part, already funded by New Jersey ratepayers under BPU rules. By giving up allowances to these types of projects, the Department will accomplish two things. First, it will give double rewards for these projects through the BPU subsidy and the extra allowances. Second, New Jersey sources are placed in a competitive disadvantage when compared to surrounding states who do not have similar giveaways. {5}

Since the environmental benefit of demand side management projects is already recognized by the two cents per kilowatt-hour for environmental externalities provided to such projects by the BPU in its DSM regulations, DSM projects should not automatically be awarded to additional benefit of NO<sub>x</sub> allowances through the Incentive Reserve. Provision of both allowances and BPU credits for DSM projects would be tantamount to double for the same benefit. Therefore, DSM projects should be allowed to receive either allowances or BPU credits, not both. {10}

RESPONSE: The kind of market based incentive provided by the incentive allowances or the OMET DERs for Demand Side Management Projects is consistent with the BPU's current considerations of removing a rate-payer's based subsidy and utilizing market based incentives. From an environmental standpoint, there are multiple benefits to demand side management including lower NO<sub>x</sub> SO<sub>2</sub>, VOC, particulate, hazardous air pollutants, and carbon dioxide emissions. These multiple environmental benefits make multiple incentives appropriate.

66. COMMENT: The Department proposed two options on how to provide for incentive allowances: 1) to create an Incentive Reserve and fund the reserve prior to each control period

based on the activity of NO<sub>x</sub> Budget Sources having emission rates of 0.15#/MMBtu of less, or 2) eliminate the reserve concept and allocate allowances directly to claimants from the next year's budget. The Department proposed these alternatives at N.J.A.C. 7:27-31.7(c)3. The Department also noted in the proposal that the provisions at N.J.A.C. 7:27-31.7(b)3 would need to be removed if the second alternative was adopted. The Department received the following comments regarding the two alternatives:

The Department should allocate allowances to energy efficiency from the next year's base emission budget (which will be referred to as the Draw Forward method) rather than using an Incentive Reserve approach. Alternative 2 at N.J.A.C. 7:27-31.7(c)3ii is preferable to Alternative 1. The Reserve approach, Alternative 1, is more ungainly to administer and use for claimants, for the Department and for other participants. Claimants must turn around their energy savings data in a very short time; the Department has to process it along with the rest of the allocation algorithm as quickly as possible to complete the allocation; other participants do not know until November how many tons are taken out by Incentive claimants. It seems to make more sense all around to allow Incentive claimants to make their claims based on generation/savings from the previous year, beginning in 1998 for the 1999 ozone season. The time frame for claims would be as follows: May 1 to September 30, 1998 potential claimants of allowances from the NO<sub>x</sub> Budget Incentive for Energy Efficiency measure kilowatt hours savings (according to the NJMVP) from all projects to be claimed; by December 15, 1998 the kWh savings data is tabulated and sent to the Department; the Department then subtracts that quantity of allowances from the next year's base emission budget; in October 1999, the claimants receive an allocation for the subtracted allowances. {4}

Alternative 2 should be chosen. Setting aside a reserve, and then tapping into the next year's allowance pool until needs are met, is unnecessarily complicated. If the following year's pool is going to be drawn upon anyway, the whole amount might as well come from this source. Choosing this option will be simpler and will delay the first withdrawal, possibly easing a "crunch" the first year. Besides this, however, there is a logical basis for using this alternative. Allocations for any given control period, distributed prior to that period, are based on the activities of the preceding years (heat input factor). Incentive allowances allocated at this same time, from the new allowance pool, will also represent activities of the previous year, when those activities had an impact on the heat input used in other parts of the calculations. It is entirely appropriate that this should be the case. {8}

USGen strongly endorses the concept of promoting Demand Side Management (DSM) and other environmentally efficient programs. We do not advocate the alternative of allocating allowances for environmentally beneficial techniques from the next year's base emission budget. However, the allowances in the Incentive Reserve should not be "taken away" from the cleanest sources, which emit NO<sub>x</sub> at levels below their allowable and less than 0.15 lb/MMBtu. Funding of the Incentive Reserve should come from the unused allowances that are now proposed to be returned arbitrarily to the 1990 budget sources. {18}

Concern with regard to the Incentive Reserve. With regard to the Incentive Reserve, the Department has proposed two options with regard to this reserve: either a reserve of finite size will be set aside at the beginning of each ozone season, or alternatively there will be no reserve and the allowances for energy efficiency will be drawn out of the subsequent year's budget at the conclusion of each ozone season. Under neither mechanism does there appear to be a firm limitation on the number of allowances. Without a firm limitation on the number of allowances

for the Incentive Reserve, there may not be sufficient allowances to provide for electric generators in the state.{10}

PSE&G supports neither of these alternatives. As proposed, unlimited claims can be made against this reserve. This will deplete an allowance budget which is already hard-pressed to sustain the compliance requirements of the State's existing budget sources, and have a destabilizing effect on the base emissions budget year after year. Before discussing the methods for allocating allowances to meet Incentive claims, PSE&G feels that the following controls should be placed on the Incentive Reserve: 1) Inclusion of a provision that proportionately returns, on an annual basis, any allowances remaining in the Reserve to the State's budget sources; 2) Removal of the provision in the rule that allows for claims to the Incentive Reserve to be satisfied using allowances from the budgets for subsequent years. {14}

The calculation methods and data requirements for the Incentive Reserve are much more exacting and complex than those for the Growth Reserve. However, there are no plausible differences between the two Reserves that call for such strong differences in the methods for allocating allowances to them. For this reason, PSE&G strongly urges the Department to replace the Incentive Reserve calculation methods and data requirements with those proposed for the Growth Reserve. This substitution would significantly streamline and simplify the allocation procedure. {14}

RESPONSE: The Department has selected the second alternative proposed at N.J.A.C. 7:27-31.7(c)3ii. This alternative eliminates the reserve and directly allocates allowances to claimants from the following year's budget. The Department has removed all references to the "Incentive Reserve" from the Subchapter and has used the term "incentive allowances" where applicable. The first alternative would be more difficult to manage and would revert to the second alternative if not enough allowances were first allocated to the Incentive Reserve. The first alternative would fund the reserve based on the operation of a portion of budget units. This basis is less effective for the use of allowances as incentives to energy efficiency projects and to environmentally beneficial energy generation. The incentive allowances are therefore more effectively funded partially by the "clean" sources since half of the difference between the allowable and actual emission rates are not allocated to such sources by the 1990 baseline units and since the allowances allocated to baseline sources would be lessened. The timing of the submission of claims for incentive allowances is discussed in the comments and responses regarding section 8. Regarding the timing of the allocation at N.J.A.C. 7:27-31.7(c)3ii, the Department will allocate the allowances after the control period, but before the pre-control period allocation of the next year.

67. COMMENT: The Department received the following comments regarding calculation details at N.J.A.C. 7:27-31.7(b)3:

At proposed N.J.A.C. 7:27-31.7(b)3ii(1), the calculation in this step requires heat input for each type of fuel burned during a specific fuel period. All of this data is not collected in the Electronic Data Reporting (EDR), therefore New Jersey needs to obtain this data through other means. If New Jersey does obtain this data through other means, it should be pointed out that the total heat input reported for these purposes will probably differ from the total heat input reported to EPA for purposes of determining NO<sub>x</sub> mass. This comment also applies to N.J.A.C. 7:27-31.7(d)3i(2) and (d)3ii(2). {1}

At proposed N.J.A.C. 7:27-31.7(b)3ii(3) within the references to the 0.15 factor in the equations, the words “The lesser of the allowable emission rate and” should be dropped. {8}

Proposed N.J.A.C. 7:27-31.7(b)3 outlines the allocation method for determining the number of allowances to be set aside for the Incentive Reserve. Proposed N.J.A.C. 7:27-31.7(b)3ii(1) contains an equation for calculating the two-year weighted allowable emission rate of a budget source based on the two control periods out of the previous three in which the source had the greatest actual heat input. The equation asks for fuel-specific heat inputs for each type of fuel used during each control period. The fuel-specific basis of the equation raises the possibility that a source may be required to determine the two highest control periods for each type of fuel it burned during each control period. For a source which burned coal, oil, and natural gas in varying combinations during each of the three previous control periods, this poses a situation in which the two highest control periods can vary, depending on relative variations in heat input for each specific fuel. PSE&G believes that the Department intended the two highest control periods to be based on the total heat input for all fuels combined. If so, then the definitions for  $AER_i$ ,  $H1_i$ , and  $H2_i$  should be revised to state this more clearly. {14}

RESPONSE: As elaborated in detail in the response to comment #66, the Department is adopting the second alternative regarding how allowances will be allocated to persons who submit claims for incentive allowances. Therefore, the proposed calculation methodology relying on heat input of budget sources is not being adopted at N.J.A.C. 7:27-31.7(b)3 and (d)3.

68. COMMENT: Proposed N.J.A.C. 7:27-31.7(b)4 addresses the allocation to “not new sources.” While this was understandably a long process of negotiation, it seems inconsistent with State goals. The method proposed does not fully reward those sources that not only exceed  $NO_x$  budget Phase II emission levels but already exceed Phase III emission levels as well. For example, any source with both an allowable and actual emission rate that is less than 0.15 lb/MMBtu is allocated allowances based on the average of those two rates. To fully reward these clean sources, the Department should base the allocation on 0.15 lb/MMBtu. This would be consistent and equitable to the allocation to less environmentally efficient sources. The current allocation methodology also does not allow existing clean sources to fully participate in the trading market. Since the Department is basing allocations on the average of allowable and actual emission rates, it precludes clean sources from generating significant allowances to sell on the open market. Clean sources are relegated to participating only marginally in what should be a “robust” market. Basing the initial allocation on 0.15 lb/MMBtu for all sources uniformly would allow clean sources to more fully participate in the open market as buyers and sellers of allowances. Allowing full participation of all sources is key to developing the robust market necessary to a cap and trade program. A uniform allocation scheme based on 0.15 lb/MMBtu for all sources should be used to provide equity and to incentivize the cleaner sources for their efforts. We do agree with the averaging approach to determining the base allocation from the most recent three years of information. {18}

RESPONSE: The Department is not allocating allowances to all source in this step based on the 0.15#/MMBtu rate, because sources having considerably lower emission rates would receive considerably more allowances than what is needed to operate. This concept was part of the compromise methodology resulting from the allocation development process. The

“clean” sources are generally post-1990 sources. The principle of the compromise is to first allocate an adequate amount of allowances to “clean” sources and reserve a reasonable amount of allowances for clean sources to grow before allocating allowances to the 1990 sources that established the budget. This principle almost certainly fully provides allowances to clean sources without providing a windfall of allowances to newer sources which are required to meet more strict emission rate limits than older sources under state and federal new source review requirements.

69. COMMENT: The equation in proposed N.J.A.C. 7:27-31.7(b)4ii(1) for calculating preliminary allowances to budget sources uses the weighted allowable emission rate ( $ER_{\text{Allowable}}$ ) from N.J.A.C. 7:27-31.7(b)3ii(1), but does not provide the equation for deriving this emission rate. Instead, it refers to the equation provided in N.J.A.C. 7:27-31.7(b)3ii(1). If the Department chooses the second alternative proposed for N.J.A.C. 7:27-31.7(b)3ii for providing allowances to meet Incentive Reserve claims, N.J.A.C. 7:27-31.7(b)3 will be stricken from the proposed rule, together with the original citation of the equation. In this event, the equation proposed in N.J.A.C. 7:27-31.7(b)3 for calculating  $ER_{\text{Allowable}}$  will have to be reinstated in N.J.A.C. 7:27-31.7(b)4ii(1). {14}

RESPONSE: Because the Department has chosen the second alternative (see response to comment #66), the Department is correcting the citation of the allowable emission rate in the equation at N.J.A.C. 7:27-31.7(b)4ii(1). The Department has also made an equivalent change at N.J.A.C. 7:27-31.7(b)4ii(2).

70. COMMENT: At N.J.A.C. 7:27-31.7(b)4ii(2), within the references to the 0.15 factor in the equations, the words “The lesser of the allowable emission rate and” should be dropped. {8}

RESPONSE: The Department agrees and has amended this provision for clarity.

71. COMMENT: Regarding N.J.A.C. 7:27-31.7(b)5, any unallocated and some unused allowances automatically revert to the older “baseline” sources, by some undefined right of ownership. It would make more sense and be more consistent if the State retained control of those allowances. It would be consistent with the plan for 2003 to make the State the recipient. It would avoid the fact of providing economic advantage to one party over another. It would give the State the opportunity to seek environmental advantage such as funding the Incentive Reserve by a more equitable method than presently proposed.

Excess allowances should be used to fund the Incentive Reserve or otherwise retained by the State for purposes of promoting environmental efficiency within the  $\text{NO}_x$  Budget Program. {18}

RESPONSE: This part of the allocation process issuing allowances to 1990 baseline sources is fundamental to the “cleanest first” allocation principals. The 1990 baseline was used to determine New Jersey’s  $\text{NO}_x$  Budget. As it would be unfair to allocate allowances only to sources that operated in 1990, it would also be unfair to allocate allowances to sources based

only on emission rate or to only use “left-over” allowances to fund the reserves. The allocation to 1990 baseline sources occurs only after “clean” sources and incentives are provided allowances. The allocation to 1990 baseline units is a transitional allocation method and is phased out beginning in the year 2003. Allocating allowances to 1990 sources starting in 1999 is an important source of allowances for the 1990 baseline sources as they transition to the more stringent emission reduction goals in 2003.

72. COMMENT: Regarding proposed N.J.A.C. 7:27-31.7(b)5ii: basing the historical portion of the 1999 - 2002 allocations on the percentage of target emissions for the 1990 sources is somewhat arbitrary, and does not embody any environmentally progressive concepts. However, it was seen in the work done in the stakeholder negotiation process that the final numbers do not vary that much, even when there is an attempt to incorporate different ideas. The ease of using this method is therefore a good reason for its acceptance. It should be pointed out, however, that sources that had emission rates below 0.2 lb/MMBtu in 1990 stand to receive a windfall of allowances from this process relative to other ‘clean’ sources in the allocation scheme. They basically receive double the credits. Since the historical portion of the allocation is meant to supply the allowances needed to sustain the trading program to sources which were originally designated in the OTC MOU as needing to reduce emissions, perhaps the list should be limited to those same sources (i.e. all sources in the 1990 baseline with emission rates greater than 0.2 lb/MMBtu). {8}

RESPONSE: The Department is not changing the table of the proportions of which allowances to historical unit are allocated in response to this comment. The issue of allocating to sources based on 1990 activity, as well as for recent activity, was discussed during the allocation development process. As mentioned in the comment, the practical aspects of allocation outweighed the concern raised.

73. COMMENT: At N.J.A.C. 7:27-31.7(c)1, PSE&G believes that allowances should not be set-aside for new sources for the portion of their allowable emission rates that exceed 0.15 lb/MMBtu, and allowances should not be allocated to new sources for the portion of their actual emission rates that exceed 0.15 lb/MMBtu. The respective equations for both the set-aside allocation method in N.J.A.C. 7:27-31.7(b)1 and the actual allocation method in N.J.A.C. 7:27-31.7(c)1 should be revised accordingly. {14}

RESPONSE: As mentioned in response to comment #60, the Department agrees with this comment. Allocating allowances to new sources at a level greater than 0.15#/MMBtu is contrary to the principles of the allocation methodology. The Department has revised this provision accordingly.

74. COMMENT: At N.J.A.C. 7:27-31.7(c)1, PSE&G believes that the Department should consider a limit on the New Source Reserve. This limit could take the form of an annual ceiling on New Source allowances or a time limit on the New Source Reserve. {14}

RESPONSE: A fixed ceiling was considered during the allocation development process. The New Source reserve does not need a fixed cap because it will only provide allowances to new sources for their first two years of operation.

75. COMMENT: The Department received the following comments regarding the timing of the post-control period distribution of allowances from the reserve accounts:

EPA is concerned with the reshuffling of allowances in the post-control period. Provisions to allocate allowances from the New Source and Growth reserves by December 15 of each year should be reconsidered in light of the unavailability of quality-assured data at this time. EPA cannot guarantee quality-assured data until late February of the following year. Also, EPA cannot be responsible for the calculations determining the level of allocations from these reserves; EPA's responsibility will be limited to transferring allowances in accordance with instructions from New Jersey. {1}

Proposed N.J.A.C. 7:27-31.7(c)1 gives the Department a December 15 deadline to allocate actual allowances from the State's base emissions budget to the NO<sub>x</sub> Budget Program's various reserves and accounts. The deadline for a budget source to submit the third-quarter emissions report upon which its allocations are based is October 30. The beginning of the actual transaction period, as set forth in the proposed rule, is November 1. The November 1 date theoretically gives budget sources two months to conduct transactions and request transfers until all budget source accounts are frozen on January 1. Understandably, before a source can realistically conduct allowance transactions, it must know exactly where it stands with regard to how many surplus allowances it will have available for sale, or how many deficit allowances it will need to purchase. However, given that the Department proposes not to release its allocation figures until December 15, the State's budget sources will not know their allowance profiles until only two weeks before the January 1 account freeze. This gives budget sources only a two-week window to participate actively in allowance trading and true-up their accounts. Three-quarters of the available transaction period will have already passed. This situation is further aggravated in that the two-week window falls during the holiday season, one of the most difficult times of year to conduct business. In addition, the end of the year is the end of the fiscal year for many companies, which further complicates the process. PSE&G feels that a December 15 deadline is inappropriate, and that the six-week window from October 30, when the Department calls for emissions reports, to December 15, when the Department releases its allocation figures, is an excessive amount of time for allocation accounting. We propose that the Department's deadline for releasing allocation figures be set no later than November 30 to give budget sources at least half the authorized transaction period to true up their accounts. A November 30 deadline is consistent with the deadline in the proposed Massachusetts NO<sub>x</sub> Budget Rule for transferring allowances into compliance accounts. {14}

RESPONSE: The Department has amended the date by which the new source reserve and the growth reserve will be distributed from December 15 to November 30. This change is made at N.J.A.C. 7:27-31.7(c)1, (c)2, (e)1, and (e)2. As mentioned in the comment, this date is equivalent to the date Massachusetts will distribute allowances after the control period and before the allowance transfer deadline. The EPA has expressed the likelihood that the data can be quality assured quickly and the willingness to focus first on data from sources in states that reallocate allowances after the control period, like in New Jersey and Massachusetts. The



Department recognizes that the EPA cannot be expected to make the allowances calculation, and that EPA cannot make any guarantees regarding the quality of the data. The data used in the calculation of will be available to the Department by October 30. This will allow one month for any quality assurance of the data to occur before the Department applies the calculations and distributes the reserve accounts pursuant to the rule. If errors in the data used to calculate the distribution of allowances from the reserves are discovered during any quality assurance activities after the reserves have been distributed, and those errors would have an effect on the number of allowances allocated, the Department has the authority to make appropriate adjustments pursuant to N.J.A.C. 7:27-31.17(h).

76. COMMENT: At proposed N.J.A.C. 7:27-31.7(c)1i, the phrase “provided that the emissions do not exceed any applicable... limit” should be change to “not to exceed any applicable... limit..” A source which exceeds a limit is still entitled to an allowance allocation under the NO<sub>x</sub> Budget rule, just not one that exceeds the limit. {8}

RESPONSE: The Department has amended this provision to make the point raised in the comment clear.

77. COMMENT: N.J.A.C. 7:27-31.7(c)1ii allocates unused allowances from the New Source Reserve to historical sources. These unused allowance should be allocated first to any budget sources that were not fully allocated in proposed Step 4. Only after these sources are fully allocated should the remainder of any unused allowances in the New Source Reserve be allocated to historical sources. {7}

RESPONSE: In the case mentioned in the comment, the only sources which would have not been fully allocated in step 4 are source having an average NO<sub>x</sub> emission rate of 0.15 #/MMBtu or greater. Most of these sources are the historical units that are allocated any remaining allowances leftover in the reserves. Consideration of an allocation approach suggested in this comment was considered during the allocation development process. However, the approach to allocate any remaining allowances to 1990 sources after allocating allowances to “clean” units was the compromise approach that balanced the diverse interests of the negotiation participants.

78. COMMENT: The equation in proposed N.J.A.C. 7:27-31.7(c)3i calculates allowances for claims involving implementation of environmentally beneficial techniques to save or generate energy. As proposed, the equation permits electric generating sources to use an emission rate of 1.5 lb/MW-hr to calculate the number of allowances they receive from the environmentally beneficial generation of electricity. However, these electric generating sources may actually operate at emission rates below 1.5 lb/MW-hr. This creates the possibility that an artificially high number of allowances will be allocated to these sources. Therefore, we suggest that allowances instead be allocated to these sources at a rate of 1.5 lb/MW-hr, unless the source’s actual emission rate is less than 1.5 lb/MW-hr, in which case the actual lb/MW-hr emission rate should be used. {14}

RESPONSE: The Department has retained the 1.5#/MW-hr allocation figure. This figure is an appropriate level of incentive for environmentally beneficial energy generation regardless of the actual emission rate of such generation. As for crediting demand side management projects, the allocation rate of 1.5#/MW-hr is an appropriate estimate of the NO<sub>x</sub> emission avoidance. This level is based on a presumptive emission rate of 0.15 pounds per hour and a heat rate of 10,000 Btu/KW-hr.

79. COMMENT: At N.J.A.C. 7:27-31.7(c)3ii, to the extent that any Incentive allowances are provided, they should only be provided up to the level of the current year's reserve as established in N.J.A.C. 7:27-31.7(b)3. The Department should never allocate allowances from the next year's based emission budget. If claims against the Incentive allocation are greater than the reserve, a proportional allocation similar to that proposed at N.J.A.C. 7:27-31.7(d)5 should be used to ratio the reserve allocated to each claim. {7}

RESPONSE: One of the purposes for incentive allowances is to prevent the NO<sub>x</sub> Budget Program and the Open Market Emission Trading (OMET) Program from crediting the same emission reduction strategy twice, that is avoidance of allowance use and generation of Discrete Emission Reduction (DER) credit. If the Department did not prohibit such double crediting, it would be counter to the emission reduction goals of the NO<sub>x</sub> Budget Program and the goal of the OMET Program to do no harm to the environment. Because this purpose is fundamental to the incentive allowance concept and because there is no limit in the OMET Program on the types of emission reductions that would need to be addressed in this manner, the Department is not placing a limit on the number of allowances to be distributed in this step.

N.J.A.C. 7:27-31.7 Annual allowance allocation - PHASE III comments

80. COMMENT: The 2003 component was not part of the consensus that we had reached in the end of our allocation negotiation process. {5}

RESPONSE: The commenter is correct that the allocation development process focused solely on the Phase II allocation methodology. However, the Department used the Phase II allocation methodology as the basis for the Phase III methodology. The only major differences are 1) the size of the budget, the switch to an output based allocation formula, and the phase-out of allocation to sources based on their operation in 1990.

81. COMMENT: The Department received the following comments generally in opposition to the Phase III allocation methodology:

The Department should reserve the adoption of the 2003 allocation method pending completion of EPA's "SIP Call" process on the basis that New Jersey should support consistent region-wide NO<sub>x</sub> standards. {14}

It is premature to establish an allocation method for Phase III. That portion of the proposed regulation, N.J.A.C. 7:27-31.7(d) and (e) should be deferred. USGen recommends

and would gladly participate in a working group to provide recommendations for the transition to a universal Generation Performance Standard in 2003. US Gen is a strong advocate of the output-based (or generation performance) standard approach for evaluating performance and emissions efficiency. If it were feasible, we would encourage this approach in Phase II. To not be consistent in this regard by 2003 only perpetuates the inequities. Given the anticipated impact of deregulation by that point, there is no logical rationale for applying a different standard for emissions compliance. {18}

MPLP questions the reality of all sources operating in New Jersey continuing to operate in the post-2003 era with only 8,200 tons of NO<sub>x</sub> allocations available. If New Jersey's economy remains flat, or if even modest growth is expected, it is more than reasonable to predict the amount of electricity consumed within the state will increase over time. Similarly, we all hope and expect the industrial economy in the state to remain vibrant with the opportunity for growth. MPLP strongly questions whether the Department, or anyone else, has done a reasonable test to determine if there will be enough NO<sub>x</sub> allocations available for sources to continue to operate in support of the New Jersey economy. We do not know the answer, but we question whether arbitrarily prescribing cuts in NO<sub>x</sub> emissions is the most viable way of determining whether businesses will continue to be able to operate in the state of the New Jersey, and whether the economy will survive in the future. We do not see that this aspect of the NO<sub>x</sub> budget process providing for a strong, stable, viable economy in New Jersey in the future. {13}

The Phase III emissions requirements cannot be achieved by some sources currently operating in New Jersey. The NO<sub>x</sub> emission allocation formula contained in N.J.A.C. 7:27-31.7(d) and (e) of the proposed Program should be modified, at a minimum, to be more consistent with the NO<sub>x</sub> reduction requirements contained in the MOU. {16}

The Department has proposed a program that will require New Jersey's major stationary sources to meet NO<sub>x</sub> reduction requirements that go well beyond those that were agreed to in the OTC MOU or OTAG. This is inconsistent with New Jersey's policy of support for comparable regional emission standards, and with efforts to encourage and improve economic growth within the State. The uncertainty regarding future boundary conditions and the lack of any compelling modeling evidence dictates elimination of the proposed Phase III reductions from the Program at this time. In fact, existing modeling indicates that the more severe NO<sub>x</sub> limitations contained in the final phase of the proposed Program are unlikely to create any measurable environmental benefit, while they force State energy and economic development costs to climb even higher than they are today. {16}

The proposed Program goes well beyond the requirements established in the OTC MOU, creating precisely the type of barrier that New Jersey is attempting to eliminate through the promotion of regional solutions and common standards. The proposed Program establishes much stricter emission caps than those required in other Northeastern states under the terms of the MOU without any apparent evidence that the Department has conducted the requisite subregional and urban-scale modeling assessments that would justify such a decision. {16}

CEED suggests postponing this rulemaking, especially with respect to Phase III, due to uncertainties relating to the transport of ozone precursors. CEED suggests that the Department delay any action relating to Phase III requirements until after finalization of EPA's SIP Call under Section 110 of the Clean Air Act (CAA), the development of Federal and regional NO<sub>x</sub> emissions trading programs, and after an evaluation of air quality resulting from required emission reductions, including NO<sub>x</sub> RACT and Phase II of the OTC MOU. CEED also

suggests delaying Phase III of this rule because the new eight-hour ozone standard alone will generate a new set of State compliance deadlines and control strategies. {16}

The allocation scheme established for the year 2003 is extreme in nature, calling for reductions far beyond those agreed to in the OTC MOU and anticipated by affected sources. It could have significant adverse consequences for the economy of the State, especially if other states do not adopt such ambitious rules. {8}

The 2003 provision is unworkable at this time and should be reserved. An Industry-NJDEP workgroup needs to be brought together to look at the true costs of complying with the 2003 provision. Based on the results of this workgroup and the outcome of the EPA 110 rulemaking, the Department can then make an informed decision on proceeding with this provision of the rule. The 1.5 lb/MW-hr target for the limit on NO<sub>x</sub> emissions during the ozone season is not achievable by the existing utility plants. Massive replacement of the existing electric generating infrastructure with technology capable of meeting the equivalent of NSPS is not achievable by 2003.

The NO<sub>x</sub> reductions scheduled for 2003 should be reserved at this time pending the outcome of the EPA regional NO<sub>x</sub> rulemaking proposed on November 7, 1997. New Jersey should not act alone or move beyond regional and Federal standards. NO<sub>x</sub> control is a regional issue and should be treated as such on a regulatory and technical/analytical (i.e. modeling) basis. New Jersey sources will have the disadvantage of being under a stricter program compared to other similar sources in other states with no apparent demonstrated benefit to New Jersey citizens. This rule is a violation of Executive Order 27 and the New Jersey Administrative Procedures Act, N.J.S.A. 52:14B-23 and 24. New Jersey has not adequately considered the impact of the proposed NO<sub>x</sub> Budget Rule on the environment and the welfare of its citizens.

Atlantic, after reviewing the rule has major concerns with the 2003 section of the rule. Atlantic feels that the Department has done minimal analysis on whether the 1.5 lb/mwhr can be met by utility coal boilers and specifically cyclones. It appears to Atlantic that the Department inserted the 2003 provision in response to an isolated group with a tunnel vision objective of shutting down utility coal generation in the State. If the 2003 section of the rule is adopted, New Jersey will find itself in a uncompetitive position when it comes to electric generation. Because Atlantic cannot presently meet this standard, B.L. England will likely have to stop burning tires which will be detriment to the environment. Once again the Department should look at its pollution control strategies from a multimedia perspective and should not separate air impacts from solid waste impacts when dealing with rulemaking. While the Department appears to think that trading will make up for shortfalls in designated NO<sub>x</sub> allowances, Atlantic is coming to the realization that trading will either be non-existent or prohibitive. {5}

Please consider not only the environmental issues but also the impact this proposal will have on our members and the economy of Southern New Jersey. In effect, we are asking the Department to balance all the interests involved with making such a tremendous change. Our concern focuses specifically on the B.L. England Station which will be impacted more than any other generation station in the country with little, if any, significant improvement in the environment. With this proposal the State is in effect requiring us to eliminate a New Jersey Utility Generation Industry and asking Southern New Jersey to lose jobs. With the deregulation of the electrical industry unfolding, we must ensure that we maintain a balance between high environmental standards, providing safe reliable New Jersey produced power, keeping employment levels high and creating new jobs and revenue sources for all citizens of the State.

We would urge the Department of Environmental Protection to take a long hard look at these regulations and reach a position that balances the many concerns that are sure to affect the residents, the employees, the employers and the consumers in the State and particularly Southern New Jersey. The B.L. England station has two units that run on either coal or oil and one unit that runs on oil only. It has always been a safe reliable producer of energy. During the oil embargo of the 1970s it was recognized nationally and rewarded for its outstanding service and ability to change from oil to coal. In addition, over the last three to four years this station has reduced its emissions by thirty-one percent. We have also been able to burn over one million five hundred thousand used tires. The scrubber addition has also produced over fifty thousand tons of gypsum which has been recycled into wallboard. These items indicate how my company is meeting the environmental concerns expressed by some citizens. It also shows that the employees at the Station are committed and working daily to provide New Jersey with the clean, reliable power that it requires. {17}

New Jersey should not act alone or go beyond regional and Federal standards. New Jersey is inconsistent with States in the Ozone Transport Region implementing Phase III allocation rules at this time. Moreover, EPA recently proposed an Ozone Rule which includes not only New Jersey or the OTC States, but also the OTAG region. Thus, the 2003 provision of the rule implementing the Phase III allocation must be reserved, if New Jersey is to remain competitive with its neighbors. More importantly NO<sub>x</sub> control is a regional issue and should be treated as such on a regulatory and technical/analytical (i.e. modeling) basis. Based on extensive and expensive studies conducted by the Ozone Transport Commission (OTC) and the Ozone Transport Assessment Group (OTAG), the member states of OTAG, including New Jersey confirmed that the role that NO<sub>x</sub> plays in the formation of ozone is on a regional level. NO<sub>x</sub> emitted from areas upwind of ozone nonattainment areas contribute significantly to the ozone exceedances in these nonattainment areas. Because of this phenomenon, OTC and OTAG were formed to assist in the development of strategies to deal with this phenomenon and in the formation of regulations to address these issues. If New Jersey acts alone in developing OTAG independent regulations, this will compromise the work of the OTC and OTAG and may actually set back accepted strategic plans designed to help New Jersey. New Jersey sources will have the disadvantage of being under a more stringent NO<sub>x</sub> reduction program (with a possible shorter time frame) compared to similar sources in other States. The rule proposes a final 2003 implementation target of 1.5 pounds of NO<sub>x</sub> per MW-hr. The NO<sub>x</sub> Cap and Trade Program proposed by EPA under Section 110 of the Clean Air Act proposes a final implementation target of 0.15 pounds of NO<sub>x</sub> per mmBtu. New Jersey's proposed NO<sub>x</sub> Budget rule is scheduled to be implemented in two phases - 1999 and 2003. The NO<sub>x</sub> Cap and Trade Program proposed by EPA under Section 110 of the CAA is scheduled to be fully implemented by 2002-2004, depending on final promulgation of the EPA rule. These differences in allocation methodology, along with the almost certainly different timetables will put the New Jersey sources under a financial and regulatory disadvantage with other sources in the Pennsylvania-Jersey-Maryland (PJM) Power Pool, during a time of significant electric deregulation. From 1999 on there will be a disadvantage to New Jersey sources in the NO<sub>x</sub> allocation proposed by the rule when compared to the NO<sub>x</sub> allocation in Pennsylvania for the same period. Because the proposed rule allocates a percentage of the base NO<sub>x</sub> Budget to new sources and IPP's, there is an inherent reduction in the amount of NO<sub>x</sub> allocations for existing, historical NO<sub>x</sub> sources. An example of the disadvantage that New Jersey utilities will have is illustrated in a comparison of Atlantic's NO<sub>x</sub> allocation percentage for 1999 to 2002 in New Jersey as

compared to a hypothetical Atlantic company in Pennsylvania. Based on the assumption that IPP's will have NO<sub>x</sub> allocations based on 1995 actual emissions (only readily available data at this time), they will be allocated approximately 2,000 tons. This 2,000 tons allocated to IPP's will be taken off of the 17,054 tons allocated to historic source, making available approximately 15,000 tons for historical sources. In addition, other allocations will be taken away from the historical sources such as DSM, energy efficiency, etc. Therefore, Atlantic will have to reduce to a level exceeding 65 percent, possibly as high as 80 percent. If Atlantic's sources were located in Pennsylvania, they would be subject only to the NO<sub>x</sub> Budget Phase II requirement of 0.2 lbs./mmBtu or 65 percent reduction. In addition, the Pennsylvania Department of Environmental Protection has added an additional average increase of approximately 6 percent to all allocations to Pennsylvania sources because of an excess in allocations. Therefore, Atlantic, if located in Pennsylvania, would end up only having to reduce to approximately 60 percent vs. possibly 80 percent for New Jersey. This is a major discrepancy and will make New Jersey sources uncompetitive compared to sources in Pennsylvania. Furthermore, since Pennsylvania has not enacted a 2003 provision, this discrepancy in allocations will probably widen (90 percent vs. 60 percent for 2003) and put companies, such as Atlantic, in an unacceptable market position, simply due to Atlantic's geographic presence in New Jersey. In 1994, Governor Whitman issued Executive Order No. 27. The legislature affirmed this commitment to business by enacting amendments the New Jersey Administrative Procedure Law, N.J.S.A. 52:14B-23-24. We realize that the Governor and the Legislature made an exception in the Order to allow for more stringent regulations to protect public health, safety and welfare. However, our review clearly indicates that the proposed NO<sub>x</sub> Budget Rule is much more stringent than the requirements of the 1990 Federal Clean Air Act amendments, more stringent than the Memorandum of Understanding (MOU) of the OTC, and more stringent than any proposal discussed during Atlantic's active participation in the NO<sub>x</sub> budget DEP-Industry workgroup. Furthermore, the proposed rule we submit does not improve the environment and more likely will make it worse. Moreover in the rule, the Department simply denies that this rule is more stringent. Therefore, the Department does not even attempt to satisfy any criteria which could arguably enable New Jersey to enact a law more stringent than Federal requirements. Therefore the rule fails to discuss any of the policy reasons and provide a "cost-benefit analysis that supports the agency's decision to impose the requirements" and demonstrates that the "State standard or requirement...is achievable under current technology...". In the absence of such discussion and demonstration, the Department is prohibited from enacting these rules. Further, this omission cannot be cured in any rule adoption and thus this rule is not authorized by law. New Jersey has failed to adequately considered the impact of the rule on the environment. The Environmental Impact section of the Preamble to the rule, referenced a document entitled "Estimated Effects of Alternative NO<sub>x</sub> Cap and Trading Schemes in the Northeast Ozone Transport Region", ICF Resources, September, 1995(ICF document) was referenced. Attempts to obtain this ICF document were difficult, and it was finally obtained in the eleventh hour of the comment period. This ICF document provides no adequate basis for the development of the NO<sub>x</sub> Budget Rule. The ICF document does not provide enough technical background information in order to scientifically justify the rule. The ICF document does not provide any environmental impact indicator measurements, such as ozone concentrations or percent reduction in ozone concentrations. Therefore, scientifically based environmental impact cannot be determined by this Document. The issue of NO<sub>x</sub> emissions and the effect on ozone concentrations is an extremely complex

issue. That is one of the reasons for the formation of OTC and OTAG and the generation of the Memorandum of Understanding between the States in the Northeast Ozone Transport Region (of which New Jersey is one). Also, based on information more recent than September, 1995, the OTAG photochemical modeling results conclude that NO<sub>x</sub> controls should be regional, rather than local. Therefore, the effort to assess the true environmental impact of the proposed NO<sub>x</sub> Budget Rule should be based on a more detailed analysis, similar to the effort conducted by OTAG in support of the OTAG/EPA NO<sub>x</sub> Budget Program. In addition to environmental issues, there is the deregulation of the electric industry that is taking place. Deregulation will open the retail electricity market, a market that New Jersey sources will have a distinct disadvantage in because of the more stringent requirements of the rule. If the rule is promulgated (as proposed), uneven markets will be created (due to the unjustified additional cost of environmental compliance to New Jersey sources) as compared to the rest of the Eastern United States. Also, the rule will foster a more uneven NO<sub>x</sub> allowance and trading market, with the advantage going to non-New Jersey sources that have less stringent NO<sub>x</sub> reduction requirements, giving New Jersey sources an even greater market disadvantage. New Jersey customers can choose to purchase electricity from these less expensive sources, resulting in increased ozone exceedances (in New Jersey), rather than pay more for electricity produced in New Jersey which will have stricter environmental standards. Atlantic has continuously warned of the effects of stricter rules on the marketplace throughout its participation in the NO<sub>x</sub> budget workgroup. Unfortunately, not only have the warnings not been heeded but instead the Department has added one of the most anti-New Jersey business provisions in New Jersey history to the rule - the 2003 provision. For all of the reasons above, Atlantic's recommendation is that the Department must reserve the 2003 provisions at this time. In summary, there are multiple reasons for the Department to accept this recommendation, including the EPA rulemaking, the possibility of ozone attainment prior to 2003 and the commitment made by Governor Whitman not to place New Jersey business in a noncompetitive position due to more stringent rulemaking. Reserving the rule at this time also would avoid an appeal of this rule based on the Department's violation of sections 23 and 24 of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. {5}

EEA is concerned about several aspects of New Jersey's proposed NO<sub>x</sub> budget program for implementation of the Ozone Transport Commission's ("OTC") Memorandum of Understanding ("MOU"). While we applaud New Jersey's exercise of discretion in seeking to craft a NO<sub>x</sub> reduction program without strict reference to the MOU, the proposed allocation of emission allowances for Phase III is premature and inappropriate, for the reasons discussed below. We particularly object to the proposed allocation of allowances for Phase III at a nominal control level of 90 percent. After the proposed set-asides for new growth and other purposes are considered, the remaining allowance allocation for existing generating units represents a control level substantially greater than 90 percent. There is no commercially demonstrated technology in the United States proven to achieve a 90 percent reduction of NO<sub>x</sub> emissions from coal-fired generating units on a retrofit basis. Control levels of 90 percent or more would represent a *de facto* limitation of operating capacity factors for existing units, and likely would be counterproductive to New Jersey's environment due to NO<sub>x</sub> disbenefits from an excessive reduction of NO<sub>x</sub> emissions. With such an excessively stringent control target, there would be few, if any, opportunities for meaningful cost savings through NO<sub>x</sub> allowance trading. Reductions necessarily would be made on a plant-by-plant basis.

Any Phase III NO<sub>x</sub> reduction plan should be based upon comprehensive subregional and urban-scale modeling. It is not evident that any modeling was performed in association with the proposed rule. For this reason alone, decisions concerning Phase III NO<sub>x</sub> controls should be deferred. EEA references a recent article from *Journal of the Air & Waste Management Association* analyzing the air quality effects of alternative NO<sub>x</sub> and VOC reductions in New Jersey. This analysis by Rutgers University examines the air quality effects of ranges of NO<sub>x</sub> and VOC controls at levels such as 25, 50, and 75 percent. In addition to photochemical grid modeling predictions of ozone maxima, the researchers develop new analytical metrics for relating ozone values to population concentrations. This is a useful tool to evaluate the effectiveness of control strategies in reducing human exposures to high levels of ozone. EEA quoted several statements from this article mentioning counter-beneficial effects of NO<sub>x</sub> reductions and quoted a statement that 75 percent VOC and 25 percent NO<sub>x</sub> reductions seems to provide the most efficient strategy. EEA then emphasized that absent a comprehensive modeling assessment, it is simply impossible for New Jersey regulators to make an informed judgment about the effectiveness of the proposed rule. For these reasons, EEA recommends that New Jersey defer action on the proposed Phase III emission reduction allocation pending the completion of appropriate statewide assessments of the comparative benefits and disbenefits of alternative levels of NO<sub>x</sub> and VOC reductions.

The MOU was negotiated prior to the Ozone Transport Assessment Group (OTAG) process, a 37-state modeling and technical assessment of ozone transport. In June 1997, state officials participating in OTAG recommended a variety of emission control options to reduce ozone transport in states within and outside of the OTR. U.S. EPA is pursuing a rulemaking proceeding to reduce ozone transport based on OTAG's recommendations, including proposed state emission tonnage "budgets" similar to the tonnage limits imposed by the OTC MOU.

OTAG recommended that states retain discretion in setting utility emission limits ranging between Clean Air Act Title IV controls and the less stringent of an 85 percent reduction from 1990 emission rates or a limit of 0.15 lb. NO<sub>x</sub>/MMBTU. OTAG also recommended that states conduct additional subregional modeling before reaching decisions on controls for utilities or other sources. OTAG did not recommend implementation of either Phase II or Phase III of the MOU.

EEA mentioned that although utility NO<sub>x</sub> reductions can reduce ozone concentrations in the Northeast, differences among the air quality effects of alternative utility control strategies are insignificant. The small incremental improvements between control levels such as 65 percent and 75 percent could be achieved more cost-effectively by alternative control options. None of the emission reduction strategies OTAG considered would allow New Jersey to demonstrate attainment with the one-hour ozone standard.

RACT and Phase II of the MOU are significant contributions by utilities in New Jersey and other OTR states toward the reduction of local and transported ozone. Emission reductions from these measures will occur sooner than those recommended by OTAG, or through EPA's ozone transport rulemaking. By the time Phase II of the MOU is fully implemented, utilities in the OTR will have reduced more emissions relative to 1990 levels than any other source category in the United States. While the extent of emission reductions resulting from OTAG or EPA's initiatives is unpredictable, any resulting emission controls could have an impact on northeastern air quality strategies. Furthermore, EPA's prospective new eight-hour ozone standard will entail compliance deadlines and control strategies different from those established for the current 1-hour ozone standard. State regulators in New Jersey and other OTR states



should avoid premature decisions on Phase III requirements until a clearer picture emerges of the scope and timing of potential control actions outside the OTR. {21}

RESPONSE: The Department is retaining the Phase III budget of 8,200 allowances as proposed. This level is determined by applying a control level of 0.15#/MMBtu or 90 percent control to the OTC 1990 Baseline Inventory. This level of control is similar to the OTAG recommendation of 0.15#/MMBtu. This level of control is also equivalent to the NO<sub>x</sub> control level in EPA's proposed SIP Call. Phase III is a necessary and integral part of the OTC NO<sub>x</sub> Program. Although some other States have only addressed Phase II within their regulatory process to date, all States are required to eventually implement Phase III of the NO<sub>x</sub> Budget Program. The OTC is currently in process of evaluating Phase III in its Mid-course evaluation process. As of the date when this notice was filed, the only option being considered in the Mid-course evaluation is that each State implement the more stringent of the default Phase III control as specified in the MOU or the level of control as specified in the proposed SIP Call. Analysis to date shows that for New Jersey, the SIP Call level of control on NO<sub>x</sub> Budget sources is more stringent than the default Phase III control specified in the MOU. Additionally, the SIP Call level of control on NO<sub>x</sub> Budget sources is equivalent to the level of control specified in this rule. Therefore, the Phase III Budget is not more stringent than what other states will require, is not more stringent than what is being required on a Federal level, and is necessary in order for the state and other areas of the Ozone Transport Region to be reasonably expected to achieve the new national ambient air quality standard for ozone through the implementation of local emission control measures.

This level of control implied in the Phase III Budget is achievable. The state of NO<sub>x</sub> control technology today can achieve emission rates well below 0.15#/MMBtu for a variety of fuels and burner configurations. The NESCAUM/MARAMA report "Status Report on NO<sub>x</sub>: Control Technologies and Cost Effectiveness" demonstrates that the overall control level specified in the Department's Phase III Budget is achievable and is cost effective.

82. COMMENT: The Department received the following comments generally opposing the Phase III allocation as not achievable or not cost effective:

Atlantic has done some preliminary evaluations of NO<sub>x</sub> control options, capabilities, and costs. Because few of these options have been tested or applied in applications like those at Atlantic's stations, there is significant uncertainty as to unit-specific capabilities and costs. Atlantic estimated these costs as \$1,600/ton of NO<sub>x</sub> removed by employing a cascade system similar to that employed at PSE&G's Mercer station through full application of SCR, \$2200/ton of NO<sub>x</sub> removed by installing two full scale SCR systems on both B. L. England coal units, burning gas during the ozone season, and \$4000/ton removed by use of water injection and dry low-NO<sub>x</sub> combustor technologies on the aircraft-derivative combustion turbine fleet.

Constraining dispatch at B. L. England would provide some relief in the short term to Atlantic, should the allowance market and controls not be available to support compliance in 1999. Under this very possible scenario, it has been determined that the local area T&D system would not be able to operate reliably during high load periods. Because there is also insufficient time to permit and construct additional T&D system infrastructure to allow for this compliance option, Atlantic could limit dispatch (and NO<sub>x</sub> allowance consumption) to periods of T&D system needs, shifting the cost of compliance on to the T&D system, the regulated

businesses, and directly to southern New Jersey residents. However, this compliance option could only be used for one season without affecting future years allowances.

The 1.5 lb/mwhr target for the limit on NO<sub>x</sub> emissions during the ozone season is not achievable by the existing New Jersey utility fleet. As evidenced by the variability in control options and costs as generated by EPA and UARG for OTAG, modeling efforts using generic, linear cost models are not reflective of actual compliance scenarios. Atlantic's extensive experience with retrofitting environmental controls onto existing power plants shows that site-specific factors always increase the cost above vendor estimates and control costs increase exponentially the tighter the constraints. Neither of these factors appear to be reflected in the performance and cost estimates used by EPA and UARG. In order to reach the limits in the rule is likely to require massive replacement of the existing electric generating infrastructure with technology capable of meeting the equivalent of NSPS. This is not achievable by 2003.

The 1.5 lb/mwhr represents an achievable limit for new sources where NO<sub>x</sub> constraints can be factored into the overall process design. No NSPS plant can be build without first specifying a combustion process capable of minimizing NO<sub>x</sub> production, then integrating into the plant design any supplemental post-combustion controls as needed, and where available, to meet NSPS. Such optimization can not be as easily achieved after the fact.

The costs do not follow a linear relationship, but rather show compliance costs increasing from a nominal \$1000/ton under RACT to over \$2000/ton for phase 1, and over \$4000/ton for phase 2.

A longer term strategy entailing fuel switching could involve repowering or new construction using high efficiency combined-cycle technology. Such a strategy could not be deployed by 1999, has implications beyond Title 1 NO<sub>x</sub> compliance, unlikely to be available even by 2003 due to industry deregulation, and has fuel diversity implications for the state and country.

While vendors and others have routinely made claims for technology capability and costs, there is actually very limited applications of SCR technology to date on cyclone-fired boilers where SCR has been installed upstream of the air preheater. Most of the overseas applications have been in "tail end" applications, at significantly higher overall cost (requiring reheater). Current estimates for control cost using SCR at B. L. England station are represented on the control curve at \$2000-\$2600/ton total cost, assuming SCR is applied in combination with possible lower cost combustion options (i.e. combustion tempering). Given this high cost, Atlantic would expect that the allowance market should provide a lower cost alternative. However, given the uncertainty of the allowance market, it would not be prudent to depend on this option being available, and at a price less than that of SCR compliance at B. L. England. In addition, SCR applied to B. L. England Units 1&2 is insufficient to bring the entire system into compliance, leaving us at least 1000 tons/year short of the target. Applying additional controls at Deepwater and all the combustion turbine sites still leaves us short, and further increases the \$/ton control cost.

Reducing dispatch in the ozone season to reduce the tonnage needed offers the potential for positive control of emissions, relying on the deregulated energy market to minimize the cost of compliance. Some of the problems with this scenario have been discussed under the 1999 discussion, in particular the dependence of the existing T&D system on eastern generation. In addition, this strategy can only be used for one season without affecting future years allowances. If used for three years, insufficient allowances may be available to operate any existing generation east of the transmission constraint.

Limiting dispatch and energy revenue from eastern generation will result in under recovery of costs forcing the units to be retired. It is very unlikely that this market alone can support the cost of operating B. L. England station.

Adding up the cost of controls plus the cost of supplemental allowances to reach the targeted tonnage corresponding to a rate of 1.5 #/mwhr adds 10 \$/MWHR to Atlantic's cost of energy from its fossil generating plants. This added cost is expected to make such generation uncompetitive.

Since the majority of the cost of compliance is due to reducing NO<sub>x</sub> from B. L. England Units 1&2 in 2003, sale or retirement of these units would be forced under industry Restructuring and deregulation. Since sale would not change the problem, only shift the compliance burden to another party with the same obligations, the retirement option must be evaluated, though the impacts are both complex and far-reaching.

An preliminary attempt was made at evaluating the retirement option in terms of cost per ton of NO<sub>x</sub> and was found to be significantly higher than any other option. However, since none of the other options are sustainable, and it is unrealistic to charge all of the costs incurred to NO<sub>x</sub> control, separate of other system impacts, it must remain a primary strategy for addressing the regulation.

The major impacts of retirement to Atlantic are the premature writedown of the station, the cost of T&D system improvements to sustain the system in 2003 (but not beyond) and the cost of replacement energy. Benefits include avoided station costs, including those associated with NO<sub>x</sub> compliance. The preliminary result of these quantified costs/benefits was a NO<sub>x</sub> control cost of over \$5000/ton over the potential remaining life of the units. {5}

Phase III would double or triple NO<sub>x</sub> control costs at many electric generating units relative to Phase II requirements, with negligible impacts on northeastern air quality. If Phase III were implemented, utilities in the OTR would incur post-RACT NO<sub>x</sub> control costs of \$377 million to \$719 million annually, with up-front capital costs of \$1.7 to \$3.5 billion. Phase III controls would increase OTR utility NO<sub>x</sub> control costs relative to Phase II limits by \$286 to \$389 million annually. Emission reductions due to Phase III controls would reduce ozone in the Northeast by roughly one part per billion (ppb) during serious ozone episodes.{21}

Under the terms of the MOU, states anticipated they would conduct regional air quality modeling to establish NO<sub>x</sub> emissions targets sufficient to achieve ambient air quality standards prior to the implementation of Phase III in 2003. These air quality modeling runs have not and cannot be completed until after the emission reductions required as a result of the EPA's SIP calls are known and the framework of EPA's NO<sub>x</sub> emissions trading program has been developed. The on-going efforts of EPA are both examples of the types of regional solutions that the State has advocated as being a necessary component of achieving ozone air quality standards within the State without imposing undue, compensatory restrictions upon in-state resources. New Jersey has steadfastly championed this public policy position in a variety of venues, including the State's new energy master plan (See, *Restructuring the Electric Power Industry in New Jersey: Findings and Recommendations*, New Jersey Board of Public Utilities, April 30, 1997; pps 127-137). and has taken a leadership role in regional efforts to address emissions transport impacts, such as the Ozone Transport Assessment Group (OTAG).

The proposed emissions reductions for Phase III are far more stringent than the default emission reduction requirements of the OTC Budget Model Rule. The Phase III MOU default targets are already very aggressive, with compliance costs that would add \$2.75 to \$9.50/MWh on to the existing cost of electricity generated by units using fossil fuels. Compliance cost

estimate developed by Energy Ventures Analysis Inc in August 1997 for the Eastern Energy Alliance. Large compliance cost range reflects differences between no trading and "perfect" inter-state NO<sub>x</sub> emission trading assumptions. A discussion of the major assumptions including NO<sub>x</sub> pollution control performance and costs estimates are included in the report, "How Much More ?" (May 1997). Although existing modeling must be updated to reflect the impact of changes in ozone boundary conditions that may result from the EPA's SIP call, there does not appear to be any compelling evidence produced by OTAG or presented by the Department to justify the adoption of the proposed Phase III requirements at this time.

The final phase of the Department's Program would set a much more stringent emissions cap of 8,200 tons of NO<sub>x</sub> per ozone season for all qualifying sources. The proposed Program sets the initial NO<sub>x</sub> budget allocation based upon a 90 percent NO<sub>x</sub> emission reduction requirement or a 0.15 lbs./MMBtu NO<sub>x</sub> emissions rate limitation. The proposed budget is 4,822 tons lower than the budget would be under the terms of the OTC Budget Model Rule. Consistent with the proposed Phase II approach, the Phase III allocation methodology would require that the 13 sources identified in the Phase II calculation offset all emissions from: new sources which came online after 1990, pursuant to N.J.A.C. 7:27-31.7(e)1; increased utilization of existing sources, pursuant to N.J.A.C. 7:27-31.7(e)2; any natural gas-fired over-compliance credits that are awarded pursuant to N.J.A.C. 7:27-31.7(e)4ii; and any incentive credits provided for energy conservation or the use of environmentally beneficial technologies, pursuant to N.J.A.C. 7:27-31.7(e)3. As New Jersey's industrial base and state energy demand grow, these offset requirements will become increasingly more stringent, resulting in emission reductions that go well beyond the initial budget basis of a 90 percent reduction requirement or a 0.15 lbs./MMBtu NO<sub>x</sub> emission rate limit.

Most egregiously, the current Phase III Program proposal would require certain stationary sources to achieve NO<sub>x</sub> reduction levels that cannot be achieved using any available control technology known to exist at this time. Unless the Department can provide clear evidence of the need for such a harsh emissions reduction requirement based upon credible modeling, the proposed Program should be modified to eliminate any requirement that could cause existing source operations to be unnecessarily or unfairly curtailed during the ozone season.

The Phase III limitation set forth in the proposed Program cannot be achieved using any known and demonstrated NO<sub>x</sub> control technology. Under the proposed requirements, State sources would be required to reduce emissions to the greater of either a 90 percent reduction from 1990 levels or a maximum NO<sub>x</sub> emissions rate of 0.15 lbs./MMBtu. Given the existing inventory in 1990, most of the required reductions must come from Atlantic Electric's BL England facility and Public Service Electric & Gas Company's Mercer generating stations. These two power generating stations account for over 50 percent of the baseline NO<sub>x</sub> allocations set forth in the Program budget. To meet the emission allocation reduction requirement of the final phase of the Program, these two stations would need to reduce their NO<sub>x</sub> emission levels by more than 93 percent if one includes offset requirements in the calculation of this reduction level.

The lowest NO<sub>x</sub> rates achieved anywhere in the world to date by a cyclone (BL England #1-2) or a wet bottom (Mercer #1-2) boiler is 0.77 lbs./MMBtu of NO<sub>x</sub>. This NO<sub>x</sub> reduction level was achieved by retrofitting selective catalytic reduction (SCR) controls onto the Merrimack station in New Hampshire. While both the BL England and Mercer facilities have slightly lower uncontrolled NO<sub>x</sub> emission rates than the Merrimack station, the current SCR performance on cyclone boilers at best might allow these units to achieve NO<sub>x</sub> emission rates

of only 0.43 and 0.54 lbs./MMBtu, respectively. This would fall far short of the performance needed to meet the allocations prescribed in the Program for Phase III before adding their emission offsets requirements.

While some limited emission allocations may be purchased from designated incentive credits, the total credits that would be available are estimated by the Department to be limited to approximately 337 tons/year. This would hardly allow these stations to meet their emissions reduction and offset requirements. As a result, the stations would be forced to reduce their generation levels during the ozone season to levels that would allow them to meet their respective emission allocations. Because these two stations accounted for approximately 18.5 percent of all the energy generated in the State of New Jersey in 1996, the resulting effect of the proposed final phase of the NO<sub>x</sub> Budget Program on local power supplies is significant.

The proposed limitations for the other solid fuel units (i.e., units operated by Vineland, US Generating or Hoffman-LaRoche) would also be set at levels that fall below those demonstrated by existing NO<sub>x</sub> control technologies. US Generating Company's units at Carney's Point and Logantown achieve the lowest emission rates of any coal-fired electric generating unit in the world today, with NO<sub>x</sub> emissions performance in the range of 0.13 and 0.14 lbs./MMBtu. Because of the requirements set forth for the final phase of the proposed Program, these units would be required to reduce NO<sub>x</sub> emission rates even further due to the allocation of allowances to others (that is, incentive allowances and the allowances reserved for new sources). Clearly, the emissions reduction levels established by the Department in the proposed Program could require even the cleanest coal-fired generating units in the world to meet technically unfeasible emission reduction rates, to purchase offset credits or to limit operations during ozone seasons. In the case of the US Generating units, this could require an expensive cut-back on coal, creating higher energy costs for electric consumers and for those industries that rely upon these facilities for reliable, low-cost thermal energy, such as DuPont's Chamber Works plant, a major employer in southern New Jersey. {16}

RESPONSE: The Department believes that the cost objections to the program are exaggerated. In June, NESCAUM and MARAMA jointly issued a report entitled "Status Report on NO<sub>x</sub> Control Technologies and Cost Effectiveness for Utility Boilers." The case studies included in this report demonstrate that advanced NO<sub>x</sub> controls are feasible and cost-effective. The report cites several advanced NO<sub>x</sub> controls technologies capable of reducing NO<sub>x</sub> emissions from electric generating boilers by 85 percent or more (that is: selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR) various type of reburning technologies, and optimal combinations of these technologies) The report shows that NO<sub>x</sub> emission rates of 0.15 pounds per million Btu and as low as 0.07 pounds per million Btu are achievable even at coal-fired boilers.. The report also cited that these emission rates can be achieved at very cost effective rates. The cost effectiveness cited in the study ranges from \$400 to \$1500 per ton of NO<sub>x</sub> removed.

83. COMMENT: The Department received the following comments generally supportive of the proposed Phase III allocation:

NJPIRG Citizen Lobby strongly supports setting a cap based on 1.5 pound per megawatt hour, roughly equivalent to the 0.15 pound per MMBtu standard. We are heartened to see that the EPA has similar goals for the twenty-two states including the Midwest whose pollution

significantly contributes to our poor air quality. We appreciate Commissioner Shinn's leadership in promoting a regional cap and in responding to the call for tighter controls on plants here in New Jersey. We stand ready to work with the Department to ensure that New Jersey's NO<sub>x</sub> reduction goals are sufficient to meet the Federal standards and provide clean air for our citizens. {20}

The proposed Phase III emissions budget of 8,200 tons, is the right target. We support the adoption of the Phase III cap because it forces older power plants to operate under the same rules as newer power plants, encourages increased use of cleaner power plants, and requires major emission reductions from the worst polluters in New Jersey. Now, it is more important than ever that we create level standards among electric generators. As the state works toward economic deregulation of the electric power industry, any unequal environmental standards can give a competitive advantage to those companies who are permitted to operate under weaker standards. In effect, unless we level the playing field now, we will be creating a subsidy for the dirtiest power plants. The proposed NO<sub>x</sub> Budget rule sets up the appropriate incentive, encouraging increased output from New Jersey's cleanest power producers. {20}

I would like to take this opportunity to commend the State of New Jersey for its leadership and commitment to implementing this important regional ozone reducing program. We believe the additional reductions proposed by the State for 2003 give a clear direction to what other States in the Ozone Transport Region should consider for the next phase of the program. {1}

The Massachusetts Department of Environmental Protection (MADEP) applauds New Jersey's approach to the allocation of allowances for the years 2003, and thereafter, based upon net electric output or net electric output and net useful steam output. MADEP agrees with the benefits this approach can provide and expects to implement a similar program for our NO<sub>x</sub> budget program beginning in 2003. {11}

RESPONSE: The Department agrees and appreciates the commenters' support.

84. COMMENT: The Department received the following comments regarding the ability to trade allowances in the years 2003 and beyond:

The allocation scheme proposed for 2003 all but eliminates the trading option (at least in New Jersey). For trading to take place, some sources must be allocated excess allowances so that they can sell them to sources which do not have enough. The way this usually works, sources which have emission rates below a prescribed target (clean sources or those that have made emission reductions) are allocated more than they need, and sources which have emission rates above a target are allocated only to the target and must acquire the additional allowances they need, presumably from the 'cleaner' sources. For a trading mechanism to function adequately and provide a benefit, the designated target around which allocations are made must be set below the emission levels of existing sources, but above the level of ultimate technological capabilities, i.e. the level of new, clean sources or the level to which older sources are capable of reducing. In the initial allocation period (1999 - 2002), sources which were existing in 1990 are allocated less than they would need if they were still operating at 1990 emission rates, but more than they would need if every source made every emission reduction possible. The allocations are based roughly on a target of 0.2 lb/MMBtu, more or less the desired average emission rate for this first phase of reductions. It is expected that a number of

sources will have reduced emissions below that target by 1999, which will leave them with excess allowances to trade to sources which cannot, or choose not to, reduce. Starting in 2003, however, under the proposal as it stands, sources which have made reductions will be allocated few, if any, excess allowances. This is because any source with an emission rate below the 0.15 lb/MMBtu target is slated to receive only an amount slightly over actual emissions (halfway between actual and permitted emissions). The 2003 allocation scheme provides that sources with emission rates above 0.15 lb/MMBtu will be allocated based on a 1.5 lb/MW-hr standard, implying that these sources are expected to still exist, but without a pool of excess allowances to draw from, there is actually little ability for these sources to continue operation. (The allocation to these sources is certainly less than they need to compensate for their actual emissions; it is probably less than they would need even if they operated at 0.15 lb/MMBtu because of higher boiler heat rates in older sources.) The overall effect of the 2003 allocation scheme, therefore, is to actually do away with the cap-and-trade program. In its place is the establishment of a new command-and-control emission standard of 0.15 lb/MMBtu. Budget sources meeting this limit are the only sources able to continue operation, and they are allocated basically what they need to run. Any emissions not allocated to these sources are placed in the 'discretionary account', and are not part of any trading process. Hopefully, eliminating the cap and trade process was not the Department's intent in setting up the 2003 allocation system. {8}

It will be extremely difficult, if not impossible, to cost effectively plan for compliance because allocations will not be known until early immediately before the control period and the allocations will change every year thereafter. Trading between New Jersey sources will be practically non-existent in 1999 and 2003, resulting in significantly adverse economic impacts in those years and the elimination of the option for future trading due to the capital investments required to comply in 1999 and 2003. The rule eliminates the flexibility intended since trading will not be possible. The Department should reserve the provisions relating to the allocation of allowances for Phase III (2003) of the program. {5}

Under the rule trading in 2003 will be non-existent in New Jersey. If the Department goes forward with the proposed 2003 section of the proposed rule, Stations such as B. L. England will not be able to purchase allowances from New Jersey sources again, because they simply will not be available. Furthermore, all New Jersey sources will be at a competitive disadvantage because New Jersey will be the only state in the country to impose such an arbitrary and capricious burden on its regulated community. Finally, the rule will result in decreasing the electrical output of stations (such as B. L. England) which have little or no impact on ozone exceedances, while increasing the electrical output of sources west of B. L. England which contribute significantly. Net effect: Increase in ozone exceedances along with increased respiratory ailments in the State. Atlantic strongly recommends that the Department evaluate the impact of the rule based on the anticipated ozone exceedances and use science to develop a final rule. {5}

RESPONSE: Trading is a valid compliance option in Phase II of the NO<sub>x</sub> Budget Program (beginning in the year 1999) and will continue to be a compliance option in Phase III beginning in 2003. Banked allowances as well as interstate trading will be available in addition to any allowances allocated to sources which are unused during the control period. In fact, some trading of allowances had been agreed by parties before the NO<sub>x</sub> Allowance Tracking System had been put in place to record the transactions.

85. COMMENT: Phase III allowance allocation should be fixed in order to promote planning and trading along with reducing the administrative burden on the Department and the regulated community. {5}

RESPONSE: The Department believes that a fixed allocation system does not provide the incentives that a self-adjusting system the Department has adopted in its “cleanest first” approach.

86. COMMENT: The Department received the following comments regarding the relationship between the Phase III NO<sub>x</sub> Budget Program and EPA’s proposed Ozone Transport SIP Call:

Clarification is needed on the difference between the EPA Proposed SIP Call and the proposed New Jersey Phase III emission budget. The EPA proposed SIP Call similarly imposes a performance standard based cap. At first glance it does appear that a ninety-percent reduction in New Jersey is more stringent than an eighty-five percent reduction that the EPA is talking about, but it is unclear that this is actually the case. The proposed EPA SIP Call budget for New Jersey utility units, based on a projection of the number of BTUs that will be used in the year 2007 multiplied by 0.15 pounds per million Btu emission rate, is 5141 tons. This figure is 3159 less than the cap that would take effect under the Department rule that we are considering today. So just as a point of clarification it was confusing to me to see that number in the EPA rule and it appears that the New Jersey cap is less stringent than what the EPA has proposed. {20}

The Department has indicated that it based the 2003 allocation procedure on the anticipated goals of the OTAG-related EPA SIP Call (0.15 lb/MMBtu or 90 percent reduction) as opposed to the reduction goals agreed to in the OTC MOU on which NO<sub>x</sub> Budget was originally based (0.15 lb/MMBtu or 75 percent reduction). Because the SIP call will have to be addressed by the Department, regardless of the MOU, this is not necessarily an unreasonable basis for action. But the EPA proposal was published only last month (October 10, 1997), and the details are certainly not yet final. In the preamble to the rule proposal, the Department indicates that this rule does not “exceed the requirements imposed by Federal law”. If EPA ultimately allots an emission total to New Jersey that exceeds the amount set aside for the 2003 allocations in this rule, that statement would not remain true. The total initially announced by EPA was actually lower than the Department 2003 allowance pool, but this may have been caused by a miscalculation or exclusion some of the NO<sub>x</sub> Budget sources. Once the initial data is completely verified, a change to the rate(s) used in the EPA calculation could yield a higher total. The comparison of this rule with the Federal standards should be left open for future re-evaluation. To the extent that the overall reduction goals may be changed by EPA, the Department should be reserving some judgment in this matter and commit to taking whatever action is necessary to keep New Jersey policies in line with the rest of the regional plan. In discussing the stringent 2003 requirements, the Department has stated that it wishes to be a leader in implementing aggressive regulations which may be needed to reach attainment, but it does not seem to fully understand the implications to New Jersey industry of a unilateral campaign. To enact an allocation system which distributes fewer allowances to sources within New Jersey relative to those being distributed to sources in other states is to simply hand over a competitive edge to those out-of-state sources, and at a time when this is a critical issue given electric utility deregulation. To a certain extent, the ultimate scope of future NO<sub>x</sub> reductions



will be dictated by the EPA SIP call process now underway, and other states will be obligated under that process as well, hopefully in an equitable fashion. But the NO<sub>x</sub> Budget program will be up and running prior to required implementation of the SIP goals, and if rules designed to meet the SIP call are not implemented by 2003, New Jersey's stricter allocation standard could put New Jersey business at a disadvantage. The Department should be careful about how tightly it holds on to the SIP goals in the NO<sub>x</sub> Budget program. The Department may wish to proceed with the adoption of this rule as is, with the ambitious 2003 goals in place, but in taking the role of leader, it should take care to re-evaluate its position as time goes on, looking over its shoulder to see who is following its lead, so that it does not end up leading New Jersey industry, particularly the electric utilities, right out of business. {8}

RESPONSE: EPA has revised its SIP Call Budget since it originally proposed the figures last November. Based on the latest EPA published information, the Department has determined that the portion of the SIP Call which applies to the same criteria of sources as prescribed in the NO<sub>x</sub> Budget Program is 9,002 tons. It is the Department's judgement that the Phase III Budget is equivalent to the latest iteration of the EPA SIP Call Budget figures. The Department recognizes that the EPA SIP Call figures are still undergoing revision. The Department reserves the need to revisit the size of the Phase III Budget until after the EPA SIP Call Budget has been finalized.

87. COMMENT: The proposed EPA SIP Call appears that it would take effect in the year 2002 rather than the year 2003. Would New Jersey's rule actually comply with the Federal rule if it is adopted as proposed? {20}

RESPONSE: The proposed EPA SIP Call has not been finalized and is considering commencement of the program between September 2002 and September 2004. If the program prescribed by the SIP Call Proposal were to begin on September 2002, then the first compliance period under the Proposed SIP Call cap and Trade Program would be May 1 through September 30, 2003, which is identical to the commencement of Phase III of the NO<sub>x</sub> Budget Program.

88. COMMENT: Regarding proposed N.J.A.C. 7:27-31.7(d), there is a great deal of duplication of language between the allocation methodologies for the periods 1999-2002 in subsection (b) and 2003 in subsection (d). The following are cited as examples:

7:27-31(b) 1	&	7:27-31(d) 1
7:27-31(b) 2i	&	7:27-31(d) 2i
7:27-31(b) 2iii(1), (2), (3)	&	7:27-31(d) 2iv(1), (2), (3)

Given the complexity of the allocation process it may be worthwhile to cite by reference those areas that are alike. {18}

RESPONSE: The Department has drafted this section which describes the allocation methodology for the years 2003 and beyond so that it can be read without referring back to provisions relating to the allocation methodology for the years 1999 through 2003. It is for this

reason that there is some duplication. The Department believes the allocation method would be more confusing if the reader would need to frequently refer back to previous sections.

89. COMMENT: Regarding N.J.A.C. 7:27-31.7(d)1, PSE&G believes that allowances should not be set-aside for new sources for the portion of their allowable emission rates that exceed 0.15 lb/MMBtu, and allowances should not be allocated to new sources for the portion of their actual emission rates that exceed 0.15 lb/MMBtu. The respective equations for both the set-aside allocation method in N.J.A.C. 7:27-31.7(d)1 and the actual allocation method in (e)1 should be revised accordingly. {14}

RESPONSE: The Department has clarified this provision in a manner consistent with the clarification made to N.J.A.C. 7:27-31.7(b)1 as discussed in the response to comment #60.

90. COMMENT: At N.J.A.C. 7:27-31.7(d)1, for reasons previously discussed, PSE&G believes that the Department should consider a limit on the New Source Reserve. This limit could take the form of an annual ceiling on New Source allowances or a time limit on the New Source Reserve. {14}

RESPONSE: As mentioned in response to comment #61, a numerical ceiling on the number of allowances in this reserve runs counter to the purpose of the reserve and any individual source may only draw from the reserve for two years.

91. COMMENT: TOSCO recommends adding “or process heater” to proposed N.J.A.C. 7:27-31.7(d)2ii to make clear that the 0.20 pounds per million Btu standard also applies to large process heaters, which are affected units, to read as follows:

“If the source is an industrial boiler or process heater, the number of allowances to be added to the growth reserve is determined...”

TOSCO recommends a similar change at N.J.A.C. 7:27-31.7(d)4i. {22}

RESPONSE: As noted in the comment, it was the Departments intent to include industrial process heaters as well as industrial boilers in this provision. The Department has made this clarification to the rule upon adoption where applicable throughout subsections (d) and (e). This intent is implicit in the manner by which the allocation system differentiates electric generating units from industrial units. The process heaters, which are industrial units, should be included in the provisions relating to allocation of allowances to industrial boilers, rather than being included in the provisions relating to allocation of allowances to electric generating units, and rather than being excluded from either category.

92. COMMENT: The Department received two comments regarding how allowances are allocated to the Growth Reserve due to the activity of industrial boilers at N.J.A.C. 7:27-31.7(d)2ii:

The breakpoint for establishing a clean source is 0.20 lb/MMBtu for industrial boilers and 0.15 lb/MMBtu for non-industrial boilers. The OTC memorandum of understanding (MOU), however, does not distinguish between boiler types but simply requires emission limits for fossil fuel fired indirect heat exchangers with a maximum rated heat capacity of 250 MMBtu/hr and greater. New Jersey should clarify why the determination of a clean unit is based on 0.20 lb/MMBtu and not 0.15 lb/MMBtu for industrial boilers. New Jersey should clarify how it is defining an industrial boiler. Or, was this an outcome of the allocation negotiation process? This comment also applies to N.J.A.C. 7:27-31.7(d)3i, to N.J.A.C. 7:27-31.7(d)4i, and to N.J.A.C. 7:27-31.7(e)2. {1}

Why are industrial boilers being brought into the program? {7}

This differentiation between industrial boilers and other budget sources should be stricken from the proposed rule for the following reasons:

- a) The differentiation is inconsistent with the OTC MOU, which calls for a universal target emission rate of 0.15 lb/MMBtu for all budget sources, and makes no exceptions for industrial boilers;
- b) The differentiation imposes increases the complexity of the proposed 2003 allocation methods, while providing little or no benefit. Its elimination would significantly simplify the 2003 allocation method;
- c) PSE&G believes that the Department may have deferred to the revised New Source Performance Standard ("NSPS") for boilers in establishing the 0.20 lb/MMBtu threshold. This NSPS, which was proposed by EPA on July 9, 1997, would establish a 0.20 lb/MMBtu emission limit for certain industrial boilers. This NSPS should not be relied upon in the context of the proposed rule for several reasons. First, the NSPS has not yet been adopted. Second, the NSPS would only apply to new, modified, or reconstructed boilers. Third, the proposed 0.20 lb/MMBtu standard does not apply in all cases. The proposed NSPS would establish a 0.10 lb/MMBtu limit for boilers with low volumetric heat release rates. Fourth, a new boiler in New Jersey would have to meet the Department's "State-of-the-Art" requirements for air pollution control, and would most likely be required to meet an emission limit much more stringent than 0.20 lb/MMBtu.

In short, PSE&G feels that throughout the proposed 2003 allocation method, the Department should eliminate the differentiation between industrial boilers and other budget sources. This action would greatly simplify the proposed allocation method and have a positive impact on the integrity of the allocation method. {14}

RESPONSE: The Department has retained the proposed emission rate of 0.20#/MMBtu by which industrial units are considered "clean" by the Phase III allocation and are therefore eligible to both fund and withdraw from the Growth Reserve. This allocation methodology does not change the overall budget figure which embodies the control requirement of the program. The additional complexity is a minor implementation technicality that will be addressed appropriately by the year 2003. The commenter is correct that this level is based on EPA's proposed New Source Performance Standard (62 FR 36947, July 9, 1997). Even though the NSPS does provide for a 0.10 #/MMBtu limit for new low heat release units for the portion of the fuel that is natural gas or distillate oil, if such use if more than 30 percent of the total heat input to the unit, the Department is using the primary NSPS standard of 0.20 #/MMBtu that EPA proposed as the benchmark by which to categorize existing industrial boilers for the purpose of allocating allowances in this program. New units would be subject to a 0.10

#/MMBtu or lower if required by new source review. The allocation to a new unit would reflect this lower limit.

This distinction as to how different unit types are allocated allowances does not change the applicability of the program, which has always included all fossil fuel fired indirect heat exchangers 250 MMBtu/hr and greater. This applicability requirement includes industrial boilers. Even though the OTC MOU and the Model Rule do not distinguish industrial units from other types of units, they leave the matter of establishing an allocation system to each State. The Department has chosen an allowance allocation system for Phase III that distinguishes between industrial and non-industrial units. The Department has defined the term “industrial boiler” at N.J.A.C. 7:27-31.2 to include a boiler from which no steam is produced for the production of electricity that is sold, supplied to any utility power distribution system, or supplied to a steam distribution that would produce electrical energy for sale.

93. COMMENT: At N.J.A.C. 7:27-31.7(d)2iv(2), in the description of  $ER_{NOx}$ , the proposed “(d)1i” should be changed to “(d)2i.” {8}

RESPONSE: The Department corrected this error upon adoption.

94. COMMENT: In the note prior to N.J.A.C. 7:27-31.7(d)3, the Department mentions two alternatives for determining the number of allowances to be allocated from the 2003 base emission budget to the Incentive Reserve. For reasons previously discussed, PSE&G supports neither of these alternatives, and feels that the following changes should be made to the Incentive Reserve:
- a) Inclusion in the proposed rule of a limit on the annual size of the Reserve—100 tons, for example--and on the claims made to this Reserve;
  - b) Inclusion of a provision that proportionately returns, on an annual basis, any unused allowances remaining in the Reserve to the State’s budget sources;
  - c) Removal of the provision in the rule that allows for claims to the Incentive Reserve to be satisfied using allowances from the budget for the following year.

As proposed, the methods for calculating the Growth Reserve and the Incentive Reserve set-asides are substantially different. The calculation methods and data requirements for the Incentive Reserve are much more exacting and complex than those for the Growth Reserve. However, there are no plausible differences between the two Reserves that call for such strong differences in the methods for allocating allowances to them. As previously discussed, PSE&G strongly urges the Department to replace the Incentive Reserve calculation methods and data requirements with those proposed for the Growth Reserve. This substitution would significantly streamline and simplify the allocation procedure. {14}

RESPONSE: For the same reasons as described in the response to comment #66, the Department has selected the second option for the allocation of incentive allowances in the years 2003 and beyond: elimination of the reserve concept, and direct allocation from the following year’s budget. The principles of the allocation of incentive allowances prohibit a fixed limit on the number of allowances to be allocated based on incentive claims. Since there is no reserve, no allowances will be remaining in a reserve to be returned to budget sources.

The number of incentive allowances to be allocated will be based solely on the amount of energy saved or generated as per proper claims and will not be based on calculations similar to those used in for the Growth Reserve.

95. COMMENT: The Department received the following comments regarding provisions proposed within N.J.A.C. 7:27-31.7(d)3:

The allocation method proposed in N.J.A.C. 7:27-31.7(d)3i differentiates between industrial boilers and other budget sources, allowing industrial boilers to use a 0.20 lb/MMBtu threshold to calculate their contribution to the Incentive Reserve. This differentiation should be eliminated, and that the 2003 allocation method for the Incentive Reserve should consist of one method for all sources at a threshold rate of 0.15 lb/MMBtu. {14}

Both N.J.A.C. 7:27-31.7(d)3i and ii propose allocation equations for determining the number of allowances to be set aside from the State's base emission budget for the Incentive Reserve. For reasons previously discussed, if it is the Department's intent to base the two highest control periods on the total heat input for all fuels combined, then the definitions for  $AER_i$ ,  $H1_i$ , and  $H2_i$  should be revised to state this more clearly. However, as previously discussed, we would prefer replacing the Incentive Reserve calculation methods and data requirements with those proposed for the Growth Reserve. {14}

In order to make clear that the 0.20 pounds per million Btu standard also applies to large process heaters (which are affected units), TOSCO recommends adding "or process heater" to the provision proposed at N.J.A.C. 7:27-31.7(d)3i to read as follows: "If the source is an industrial boiler or process heater, the number of allowances to be added to the Incentive Reserve is determined..." {22}

At N.J.A.C. 7:27-31.7(d)3i(2), Under Equation 2 and 3, the description of  $E_{actual}$  should have the word "allowable" changed to "actual." {3}

In the proposed method for determining Incentive Reserve allowances for industrial boilers, N.J.A.C. 7:27-31.7(d)3i(2) defines both  $E_{Allowable}$  (Equation 1) and  $E_{Actual}$  (Equation 2) as "the average allowable emissions for the source." {14}

At N.J.A.C. 7:27-31.7(d)3ii, to the extent that any Incentive allowances are provided, they should only be provided up to the level of the current year's reserve as established in N.J.A.C. 7:27-31.7(d)3. The Department should never allocate allowances from the next year's based emission budget. If claims against the Incentive allocation are greater than the reserve, a proportional allocation similar to that proposed at N.J.A.C. 7:27-31.7(d)5 should be used to ratio the reserve allocated to each claim. {7}

In N.J.A.C. 7:27-31.7(d)3ii(2), the text should read "not greater than 0.15 pounds of  $NO_x$  per MMBtu . . ." instead of "greater than 0.15 . . ." The same comment applies to N.J.A.C. 7:27-31.7(d)4ii(2). {1}

At N.J.A.C. 7:27-31.7(d)3ii(2), this should read "If the average  $NO_x$  Emission Rate (ER  $NO_x$ ) of the source as calculated in (d)2i above is not greater than...." {7}

At N.J.A.C. 7:27-31.7(d)3ii(2), it appears that the word "greater" should be changed to "less." {3}

This appears to be a typographical error. In N.J.A.C. 7:27-31.7(d)3ii(2), the proposed method for all other sources,  $E_{Actual}$  is more accurately defined as "the actual emissions for the source." If the Department chooses to retain the industrial boiler differentiation, the definition of  $E_{Actual}$  in N.J.A.C. 7:27-31.7(d)3i(2) should be corrected. {14}

RESPONSE: As indicated in the response to comment #66, the Department has selected a method of allocating incentive allowances without using a reserve account. The provisions for funding such a reserve proposed at N.J.A.C. 7:27-31.7(d)3 have therefore been deleted. Therefore, these comments are moot.

96. COMMENT: The allocation method proposed in N.J.A.C. 7:27-31.7(d)4i differentiates between industrial boilers and other budget sources, allowing industrial boilers to use a 0.20 lb/MMBtu threshold to calculate their contribution to the Incentive Reserve. For reasons previously discussed, PSE&G feels that this differentiation should be eliminated, and that the 2003 allocation method for determining preliminary allocations should consist of one method for all sources at a threshold rate of 0.15 lb/MMBtu. { 14 }

RESPONSE: As mentioned in the response to comment #92, the Department has made this differentiation based on EPA's proposed New Source Performance Standards (NSPS). This differentiation is necessary so that industrial boilers that comply with the NSPS will receive enough allowances to operate under the NO<sub>x</sub> Budget Program.

97. COMMENT: The equation proposed in N.J.A.C. 7:27-31.7(d)4i(2) for calculating preliminary allowances to industrial boiler sources uses the average allowable ( $E_{\text{Allowable}}$ ) and average actual ( $E_{\text{Actual}}$ ) emissions figures derived in N.J.A.C. 7:27-31.7(d)3i(2), but does not provide the equations for deriving these figures. Instead, it refers to the equations provided in N.J.A.C. 7:27-31.7(d)3i(2). If the Department chooses the second alternative in N.J.A.C. 7:27-31.7(e)3ii for calculating allocations to meet Incentive Reserve claims, N.J.A.C. 7:27-31.7(d)3 will be stricken from the proposed rule, together with the original citations of these equations. In this event, the equations proposed in N.J.A.C. 7:27-31.7(d)3i(2) for calculating  $E_{\text{Allowable}}$  and  $E_{\text{Actual}}$  will have to be reinstated in N.J.A.C. 7:27-31.7(d)4i(2). { 14 }

RESPONSE: The Department has placed the necessary equations at this equation.

98. COMMENT: The equation in N.J.A.C. 7:27-31.7(d)4ii(1) is capable of calculating a budget source's preliminary allocations whether the source generates electricity, useful heat, or both. Given the fact that industrial boilers can generate both electricity and useful heat, this equation readily lends itself to the calculation of allowances for both industrial boilers and other sources. In addition, the equation is straightforward, and requires little preliminary calculation. The fact that it can be used to calculate allocations for industrial boilers further supports PSE&G's request to eliminate the differentiation between industrial boilers and other budget sources. PSE&G believes that the equation in N.J.A.C. 7:27-31.7(d)4ii(1) should be used to calculate preliminary allocations for industrial boilers as well as other sources which generate electricity and/or useful heat. { 14 }

RESPONSE: The number of allowances for industrial boilers and process heaters is determined through N.J.A.C. 7:27-31.7(d)4i. The number of allowances for other sources are determined through N.J.A.C. 7:27-31.7(d)4ii. The reason for the differentiation is based on the

EPA's proposed NSPS standards for these types of units. The distinction is only being made in Phase III because of the expiration of allocation of allocation based on 1990 emissions during this phase of the program.

99. COMMENT: Regarding N.J.A.C. 7:27-31.7(d)4, the Department should revise the 2003 allocation method to reflect a true Generation Performance Standard (GPS). Short of reserving the adoption, the Department should revise the 2003 allocation method to reflect a true GPS, in which a budget source is held to a fixed emission standard and a known and reliable compliance target. As proposed, the 2003 allocation method does not constitute a true GPS. A true GPS is designed to provide a  $\text{NO}_x$  emission source with a known compliance target. We support a standard of 1.5 lb/MW-hr. However, because the various reserves drain allowances away from budget sources, these sources will receive an allocation based on a rate of less than 1.5 lb/MW-hr, probably on the order of 1.1 or 1.2 lb/MW-hr. {14}

Regarding N.J.A.C. 7:27-31.7(d)4, relating to the allocation of post-2003 for useful heat production: it does allow an allocation for that type of production for the dirtier facilities but for the cleaner facilities it does not permit recognition of allowances for other useful heat production such as cogeneration and we think that is an imbalance that you should address. It is not fair to provide dirty sources with that opportunity and not cleaner sources. {9}

Regarding N.J.A.C. 7:27-31.7(d)4, with regard to the allocation of allowances for useful heat: it only recognizes the production of useful heat after 2002, and then only for dirtier sources - those with average emission factors greater than 0.15 lbs/MMBtu. While cleaner sources can receive more than their average actual emission from the best two out of the three previous years, they cannot receive any allocation for the production of useful heat. This ignores the contribution to energy efficiency made by the replacement of industrial boilers with cogeneration facilities, for example. IEPNJ suggests that cleaner sources receive an allocation for useful heat output. {10}

We disagree with the fact that the allocation method in Phase III is not consistent between sources greater than 0.15 lb/MMBtu and those less than 0.15 lb/MMBtu. The "dirtier" sources are allowed to take into account useful heat output (steam) and base their allocation on an output based standard. The "clean" sources continue to be evaluated on an input basis and with no regard for steam output. {18}

The Department should be applauded for proposing an output-based standard (1.50 lbs/MWh) for the control period in the year 2003 and in each year thereafter; however, an output-based standard should be fairly applied to all fossil fuel-fired sources of electricity. For 2003 and each year thereafter, the Department should wait a few years before proposing the details of implementation of a uniform output-based performance standard. In a few years, especially after electricity restructuring efforts have been implemented, the  $\text{NO}_x$  budget sources will be more than willing to come back to the table to discuss with the Department the details of implementation of an output-based program. We strongly urge the Department to use a uniform output-based performance standard and an additional allocation for useful heat output for both "dirty" ( $\text{ER}_{\text{NO}_x} > 0.15 \text{ lbs/MMBtu}$ ) and "clean" ( $\text{ER}_{\text{NO}_x} < 0.15 \text{ lbs/MMBtu}$ ) facilities. The current proposal penalizes newer cleaner facilities for abiding by stricter air quality rules and incurring the commensurately higher capital and operating costs. In 1995, independent power producers accounted for 54 percent of the electricity generated by fossil fuel-fired plants in New Jersey, but emitted only 14.6 percent of the  $\text{NO}_x$  emissions. The overall objective

should be to clean up New Jersey's air while holding all fossil fuel-fired sources to a single uniform standard for NO<sub>x</sub> emissions — in a sense, leveling the “playing field” such that all electricity generating facilities abide by a uniform output-based performance standard. A uniform, output-based performance standard provides a number of environmental benefits consistent with the emerging competitive electricity market:

- It meets the general Clean Air Act objectives of creating market-based solutions to emission control problems;
- It creates incentives to encourage continuing emissions control improvements to all generating sources;
- By promoting efficient generation technology, it provides significant collateral reductions in emissions of other pollutants of concern;
- It provides a template for allocating emission allowances for any pollutant for which a fixed cap on aggregate emissions is established; and
- Periodically adjusting the output-based standard ensures that aggregate emissions will not exceed levels necessary to protect the environment and human health.

In addition, an output-based standard is consistent with the overall objectives of electric power market restructuring. When an output-based standard is used for both dirty and clean sources, it:

- ensures fair and robust competition by eliminating the subsidy created by current disparate Federal Clean Air Act standards;
- rewards efficiency and innovation in the power generation sector, thereby encouraging the most efficient and cleanest facilities to maximize their capacity utilization;
- provides maximum operating flexibility for power plants to adjust to changing levels of demand for electric power and to continue to meet emission standards;
- promotes economic growth and development by removing market barriers to new innovative and efficient generators; and
- uses a flexible, market-based mechanism to address air emission concerns.

These benefits are only fulfilled if the output-based performance standards are uniform - the standards must be applied to both dirty and clean sources of electricity. Furthermore, an output-based standard is practical to implement. It provides flexibility in the promotion of plant efficiency; permits the measurement of parameters related to stack NO<sub>x</sub> emissions and plant efficiency; and is suitable for equitable application on a variety of power plant configurations. Unlike current regulations, a uniform output-based standard is applied to all plants. It provides flexibility through a market trading mechanism for individual plants to buy and sell emission allowances in meeting their emission control obligations. Units whose emission rate is below the output-based standard would generate excess NO<sub>x</sub> certificates to sell into the market or to bank for future use. Units whose emission rate is above the output-based standard have a variety of options through which they can match NO<sub>x</sub> emissions to NO<sub>x</sub> certificates, including installation of pollution control equipment, fuel switching, reduction in megawatt hours generated, and use of banked certificates from other affiliated generation units. Thus, an output-based standard coupled with the ability to trade allowances ensures that reductions are achieved cost-effectively (i.e., at the lowest achievable cost). Finally, the details of applying an output-based standard should allow for the fact that cogeneration facilities generate both electricity and steam. All electricity generating facilities, including clean cogeneration facilities, should receive a credit for the Kw/hr equivalent of the steam produced. {6}



RESPONSE: Sources with NO<sub>x</sub> emission rates less than 0.15 pounds per MMBtu will receive allowances at a level halfway between their actual and allowable emission rates. The allocation method provides more allowances than the source would need provided the source operates at its average recent activity level. To the extent that such sources have allowable emission rates expressed on an output basis (for example the NSPS standards proposed at 40 CFR 60 Subparts Da, and Db), such sources will be allocated on an output basis as well.

100. COMMENT: The equation proposed in N.J.A.C. 7:27-31.7(d)4ii(1) calls for sources to use an allocation rate of 0.44 to calculate their preliminary allowances based on net useful heat output. This 0.44 allocation rate serves as a factor to convert useful heat to equivalent MW-hr. Although the Department did not explain the origin of this factor in the preamble to the proposed rule, PSE&G believes that the 0.44 factor is based on assuming hypothetical 100 percent conversion of useful heat to equivalent MW-hr. Realistically, however, typical thermal cycle efficiencies are on the order of 80 percent. Therefore, PSE&G believes that the proposed 0.44 factor should be reduced to approximately 0.35, or 80 percent of 0.44, to reflect realistic rather than hypothetical conversion efficiencies. Otherwise, the use of a 0.44 factor would unfairly favor useful heat output over electric output by allocating a disproportionately high number of allowances to useful heat output.

RESPONSE: The commenter is correct in that the 0.44 factor is derived from converting the 1.5#/MW-hr factor into pounds per net useful heat output (expressed in #/MMBtu). The commenters concern in over-allocating allowances is addressed in the definition of net useful heat output. The amount of energy to be multiplied by the factor conservatively accounts for efficiencies of a unit. The net useful heat output definition, which was derived from the definition of net useful work in the proposed NSPS, specifies one half (or 50 percent) of the total heat from the steam not used for electricity generation nor auxiliary functions. This factor is applied within the net useful heat term rather than the 0.44 factor.

101. COMMENT: The equation proposed in N.J.A.C. 7:27-31.7(d)4ii(1) calls for electric generating sources to input values for net electric output, expressed in MW-hr. The proposed call for net as opposed to gross output imposes an unnecessary, redundant, and costly monitoring requirement on budget sources without the justifying basis of any additional environmental benefit. As further explained in our comments to N.J.A.C. 7:27-31.16, PSE&G strongly supports the use of gross, rather than net, electric output in the 2003 allocation method for the following reasons. First, electric generating sources typically track gross electric output for reporting purposes, and track their net electric output only for internal purposes. The manner in which this information is collected can vary widely among different generating sources, resulting in potential discrepancies in data collection and formatting. It would impose a substantial administrative burden and an onerous cost burden on generating sources to modify their net electric output tracking processes to a consistent standard format. This additional burden provides no environmental benefit. Second, the Electronic Data Report ("EDR") required by the EPA already calls for the reporting of hourly gross electric output. Budget sources are required to use the EDR as the chief emissions reporting vehicle for the proposed

NO<sub>x</sub> Budget Program. Therefore, the use of gross MW-hr data is consistent with existing reporting protocols. {14}

In N.J.A.C. 7:27-31.7(d)4, EPA has several concerns at this point in time about allocating based on output. The first is that EPA is not currently prepared to provide additional data to support this approach through the EDR. While EPA and New Jersey may be able to work out a way to do this, New Jersey and EPA will need to work out rules to ensure that this is done in a way that would not conflict with the data currently collected in the EDR. In addition, New Jersey must provide specific guidance to its sources about how to report this data. EPA's second concern is that the methodology for reporting output data be complete. For instance, N.J.A.C. 7:27-31.7(d)4 talks about using source level output data, but the definitions talk about the data being plant level data. How is the data allocated to individual units? If a plant has both affected and non-affected units, how is the output for the non-affected units subtracted out of the plant level output? Further, the calculation requires the use of "the net useful heat output, expressed in MMBtu", earlier in the rule this is defined as "the net useful work performed by the steam or heat generated, not including both the energy requirements for auxiliaries and emission controls and the net electrical output performed by the steam generated". It is not clear that all sources would monitor/calculate that value in the same way, based on this limited definition. {1}

RESPONSE: The Department has retained the use of net energy production rather than gross output as the basis for allocating allowances to sources in the years 2003 and beyond. The principle of allocating NO<sub>x</sub> allowances based on net output (that is, how much energy is provided) rather than gross output is fundamental to the proposed provisions. This principle is truer to the output based concept and better addresses generation efficiencies because it allocates allowances based on how much electricity is transmitted rather than allocating allowances based partially on how much electricity is consumed in the process of energy generation. The Department will continue to work with both the facilities (who will report data) and EPA (who operate the NO<sub>x</sub> Emission Tracking System) in order to minimize the burdens of reporting net output data.

102. COMMENT: We presume that the equation proposed in N.J.A.C. 7:27-31.7(d)4ii(1) is intended for use by sources with emission rates greater than 0.15 lb/MMBtu, and that the equation proposed in N.J.A.C. 7:27-31.7(d)4ii(2) is intended for use by sources with emission rates not greater than 0.15 lb/MMBtu. If so, the word "not" should be inserted in the phrase "is greater than" in the paragraph preceding the equation. {14}

N.J.A.C. 7:27-31.7(d)4ii(2) - The citation which reads "If...emission rate... is greater than 0.15..." is actually meant to read "is not greater than 0.15." {18}

In N.J.A.C. 7:27-31.7(d)4ii(2), the opening sentence should read "not greater than 0.15 pound of NO<sub>x</sub> per MMBtu..." {8}

N.J.A.C. 7:27-31.7(d)4ii(2) contains a typographical error. It is believed that the Department really intends to propose that if the average NO<sub>x</sub> emission rate is less than 0.15 pounds of NO<sub>x</sub> per MMBtu, then these sources will receive allowances equivalent to halfway between their actual average emissions and their maximum allowable emissions, with no additional allocation for useful heat output. {6}

At N.J.A.C. 7:27-31.7(d)4ii(2), this should read “If the average NO<sub>x</sub> Emission Rate (ER NO<sub>x</sub>) of the source as calculated in (d)2i above is not greater than....” {7}

RESPONSE: The Department has corrected this error upon adoption.

103. COMMENT: The equation proposed in N.J.A.C. 7:27-31.7(d)4ii(2) for calculating preliminary allowances to budget sources uses allowable and actual emissions as derived by equations in N.J.A.C. 7:27-31.7(d)3i(2). If the Department chooses the second alternative proposed for N.J.A.C. 7:27-31.7(e)3ii for calculating allocations to meet Incentive Reserve claims, N.J.A.C. 7:27-31.7(d)3 will be stricken from the proposed rule, together with these equations. In this event, the equations proposed in N.J.A.C. 7:27-31.7(d)3i(2) for calculating  $E_{\text{Allowable}}$  and  $E_{\text{Actual}}$  will have to be reinstated in N.J.A.C. 7:27-31(d)4ii(2). {14}

The definitions for  $E_{\text{Allowable}}$  and  $E_{\text{Actual}}$  in N.J.A.C. 7:27-31.7(d)4ii(2) cite the incorrect reference for the equations used to derive these figures. The reference for both  $E_{\text{Allowable}}$  and  $E_{\text{Actual}}$  should be revised to (d)3i(2). {14}

In N.J.A.C. 7:27-31.7(d)4ii(2), in the description of factors, both references to “(d)4ii(2)” should be “(d)3ii(2).” It should be noted that if section 3 is removed due to the choice of alternative 2 in the Incentive reserve section, these equations will need to be placed in this section in their entirety.{8}

At N.J.A.C. 7:27-31.7(d)4ii(2) the definitions of  $E_{\text{Allowable}}$  and  $E_{\text{Actual}}$  refer to (d)4ii(2) for its definition but it is believed that the Department really intends to define these values at (d)3ii(2). {6}

RESPONSE: The commenters are correct in that the proposed citation errors at this provision. The Department has reserved the provisions at N.J.A.C. 7:27-31.7(d)3 upon adoption. Therefore, the Department has inserted the appropriate equations into N.J.A.C. 7:27-31.7(d)4ii(2), from proposed N.J.A.C. 7:27-31.7(d)3ii2.

104. COMMENT: The Department received the following comments regarding alternatives to allocating any allowances leftover from the 8,200 into the “attainment/reserve account” as specified in proposed N.J.A.C. 7:27-31.7(d)5:

Proposed N.J.A.C. 7:27-31.7(d)5ii(2) indicates that any allowances remaining in the base emissions budget after the allocations in N.J.A.C. 7:27-31.7(d)5i have been distributed will be sent to the Department’s discretionary account. PSE&G feels that it is imperative that the Department revise the 2003 allocation method to return any remaining allowances to companies with 1990 budget sources, as is done under the proposed 1999-2002 allocation method. Given the extremely tight State-wide allocation of 8,200 allowances starting in 2003, New Jersey sources cannot afford to have additional allowances transferred to the Department’s discretionary account. As a specific measure, we propose that the percentages in Table 1 of N.J.A.C. 7:27-31.7(b) be repeated in N.J.A.C. 7:27-31.7(d)5ii as a template for returning remaining allowances to 1990 budget sources for 2003 and beyond.

Proposed N.J.A.C. 7:27-31.7(e)4 provides a method for allocating any allowances remaining in the New Source and Growth Reserves following allocations to claims against these reserves. This method, beginning in N.J.A.C. 7:27-31.7(e)4i, calls for the Department to

compare the allowances remaining in the two reserves to the difference between the number of allowances preliminarily allocated to budget sources and the number of allowances actually allocated to budget sources. N.J.A.C. 7:27-31.7(e)4ii and iii provide calculation methods for returning unused New Source and Growth Reserve allowances based on this comparison. In the case of N.J.A.C. 7:27-31.7(e)4iii, the amount of New Source and Growth Reserve allowances returned is “ratcheted” to equal the difference between the number of allowances preliminarily allocated to budget sources and the number of allowances actually allocated to budget sources. This means that not all of the unused allowances are returned to the budget sources, and, as per N.J.A.C. 7:27-31.7(e)4iii(2), the unreturned allowances are transferred to the Department’s discretionary account. PSE&G believes that this method for returning unused New Source and Growth Reserve allowances is flawed and should be revised. All unused New Source or Growth Reserve allowances should be rightfully returned to budget sources. Given the extremely tight State-wide allocation of 8,200 allowances starting in 2003, New Jersey sources cannot afford to have additional allowances transferred to the Department’s discretionary account. As previously discussed in our comments on N.J.A.C. 7:27-31.7(d)5, PSE&G strongly supports revising the 2003 allocation method to return any remaining allowances to companies with 1990 budget sources. Reinstatement of this allocation component provides an effective solution to the issue of returning unused New Source and Growth Reserve allowances. However, if this action is not taken, unused New Source and Growth Reserve allowances should be returned in the following manner:

- a. Unused Growth Reserve allowances should be returned on a pro-rated basis to the sources that actually contributed to the Growth Reserve. For example, if the Growth Reserve set-aside is 500 tons, and 60 percent (300 tons) are claimed (leaving 40 percent, or 200 tons, unclaimed), then each source that contributed to the Growth Reserve should receive back 40 percent of its individual contribution to the Growth Reserve;
- b. Unused New Source Reserve allowances should be returned proportionately to a source’s contribution to the State-wide total preliminary allocation under N.J.A.C. 7:27-31.7(d)4. For example, if a source has a preliminary allocation of 200 tons, and the State-wide total preliminary allocation is 2,000 tons, the source should receive 10 percent of the unused New Source Reserve allowances.

PSE&G believes that this method of returning unused New Source and Growth Reserve allowances is more fair and equitable than the proposed method, and ensures that all unused allowances from these reserves are returned to New Jersey budget sources. As previously discussed, we believe that it is unreasonable to transfer additional allowances to the Department’s discretionary account the over and above the 4,822 already set-aside for this purpose. {14}

N.J.A.C. 7:27-31.7(d)5ii(2): Depending on what was intended, there are a number of options to correct this situation. Starting with whatever emissions cap is desired for the year 2003 (the EPA mandated cap is recommended), the following allocation systems are possible: (1) Leave the allocation scheme as is, but instead of placing any allowances into the discretionary account, distribute ‘leftover’ allowances to all sources, proportional to their preliminary allocations, until the cap is reached (i.e., eliminate (d)5ii., and use (d)5iii. in all cases); (2) Leave the allocation scheme as is, but instead of placing any allowances into the discretionary account, distribute ‘leftover’ allowances to ‘clean’ sources only proportional to their preliminary allocations, until the cap is reached (i.e., change (d)5ii to reflect this distribution); (3) Change the allocation scheme to truly reflect a ‘generation performance

standard' by dividing the cap by the total generation component used in determining allocations (or determining a single standard by some other criteria) and distribute all allowances based on a single lb/MW-hr standard, regardless of the actual emission rate of any individual source (i.e., totally rework steps 4 & 5). Each of these options allows for at least some trading around an average target emission rate, either openly designated or embodied in the numbers, upholding the cap and trade philosophy. The difference between each option is the extent to which the Department chooses to maintain separate requirements, in recognition of differing circumstances, of older and newer sources. (The societal benefit of having existing sources continue to operate through their functional lives would be a consideration in this regard.) (NOTE: While it could be argued that sources in need of allowances might be able to go out-of-state to acquire them, the Department should not be setting up a system that depends on an influx of allowances. It should be providing a coherent system that can operate within New Jersey alone). {8}

RESPONSE: The Department agrees that the Phase III allocation system should allocate all of the 8,200 allowances which comprise the Phase III New Jersey NO<sub>x</sub> Budget and should not withhold any of these allowances in the "attainment reserve." For this reason, the Department is considering amendment of the Phase III allocation provisions in order to allocate all of the 8,200 allowances. The Department will take into consideration the various methods commented herein and will seek input from interested parties before proposing any future change.

105. COMMENT: Proposed N.J.A.C. 7:27-31.7(d)5iii provides an equation for "ratcheting down" the number of allowances to budget sources if the sum of all the components under (d)5i exceed 8,200 allowances. The equation subtracts the variables A0 through A3 from 8,200 before it reaches allocations for budget sources. Variable A0 includes allowances for Incentive Reserve claims from previous years, allowances the Department may choose to give to other jurisdictions, and allowances required by the NATS Administrator to reconcile allocation errors. Variables A1 through A3 constitute allowances for the New Source Reserve, the Growth Reserve, and the Incentive Reserve, respectively. These three reserves as currently proposed are uncapped, and pose the risk of drawing an unlimited number of allowances away from allocations for budget sources. As such, the possibility exists that variables A0 through A3 may exceed 8,200 allowances, effectively depleting the base emissions budget and resulting in the failure of the NO<sub>x</sub> Budget Program. To offset this possibility, PSE&G has proposed controls and limits for all three reserves. We would like the Department to consider this possibility and institute the safeguards we have recommended in our comments. {14}

RESPONSE: As previously mentioned, the use of these reserves and incentive allowances are an integral part of the allocation methodology and must be drawn from the New Jersey Budget of 8,200 allowances. Although there is no set "cap" on how many allowances may be drawn from the base budget, the scope by which the new source reserve and the growth reserve and the incentive allowances draw from the budget is limited. It is for these reasons that the department has not capped how many allowances may be allocated as Incentive Allowances or how many allowances may be allocated into the New Source Reserve and the Growth Reserve.

106. COMMENT: For reasons previously discussed, PSE&G believes that allowances should not be set-aside for new sources for the portion of their allowable emission rates that exceed 0.15 lb/MMBtu, and allowances should not be allocated to new sources for the portion of their actual emission rates that exceed 0.15 lb/MMBtu. The equation in N.J.A.C. 7:27-31.7(e)1 should be revised accordingly. {14}

RESPONSE: As mentioned in the response to comment #60, the Department agrees that this matter of principle was presumed when proposed. The Department has added language to the provision at N.J.A.C. 7:27-31.7(e)1 to made this presumption explicit. The Department has made an additional clarification here for industrial boilers and process heaters in order to distinguish the emission rate of 0.20#/MMBtu for such units.

107. COMMENT: Regarding proposed N.J.A.C. 7:27-31.7(e)1, PSE&G believes that the date in which the Department allocates New Source Reserve allowances should be revised from December 15 to no later than November 30. {14}

Proposed N.J.A.C. 7:27-31.7(e)2 cites December 15 as the date the Department will allocate Growth Reserve allowances. As previously discussed, PSE&G believes that the date in 31.7(e)1 in which the Department allocates Growth Reserve allowances should be revised from December 15 to no later than November 30. {14}

RESPONSE: The Department agrees and has amended the provisions accordingly for the same reasons mentioned in response to comment #75.

108. COMMENT: Proposed N.J.A.C. 7:27-31.7(e)2i states that industrial boilers may draw allowances from the Growth Reserve at a threshold rate of 0.20 lb/MMBtu and holds all other budget sources to a threshold rate of 0.15 lb/MMBtu. For reasons previously discussed, PSE&G feels that the differentiation between industrial boilers and other budget sources should be eliminated, and that the 2003 allocation method for the Growth Reserve should consist of one method for all sources at a threshold rate of 0.15 lb/MMBtu. {14}

RESPONSE: As mentioned in response to comment #92, the department is retaining the distinction for industrial boilers to be consistent with the EPA's proposed NSPS standards for such sources.

109. COMMENT: For reasons previously discussed, we suggest that allowances be allocated to sources that generate electricity through the use of environmentally beneficial techniques at a rate of 1.5 lb/MW-hr, unless the source's actual emission rate is less than 1.5 lb/MW-hr, in which case the actual lb/MW-hr emission rate should be used. N.J.A.C. 7:27-31.7(e)3i should be revised accordingly. {14}

RESPONSE: As mentioned in response to comment #78, the department is retaining the allocation rate of 1.5 #/MW-hr for eligible claimants of incentive allowances, regardless of the

actual emission rate of the energy generation of the actual emission rate being avoided by energy efficiency.

110. COMMENT: The proposed rule presents two alternatives for N.J.A.C. 7:27-31.7(e)ii, the allocation method for claims against the Incentive Reserve. For reasons previously discussed, PSE&G supports neither of these alternatives, and feels that the following controls should be placed on the Incentive Reserve:
- a) Inclusion in the proposed rule of a limit on the annual size of the Reserve—100 tons, for example--and on the claims made to this Reserve;
  - b) Inclusion of a provision that proportionately returns, on an annual basis, any unused allowances remaining in the Reserve to the State's budget sources;
  - c) Removal of the provision in the rule that allows for claims to the Reserve to be satisfied using allowances from the budget for the following year. {14}

RESPONSE: As mentioned in the response to comment #64, the Department is not placing a numerical limit on the number of incentive allowances which can be claimed. As mentioned in the response to comment#66, the Department has selected the second option with respect to how the department will allocate incentive allowances (without using a reserve).

111. COMMENT: PSE&G takes vigorous exception to proposed N.J.A.C. 7:27-31.7(i), in which the Department reserves the right to allocate to other jurisdictions up to two percent of the State's allowances. Two percent of the annual 1999-2002 budget amounts to 347 tons of allowances each year. This set-aside, which was never discussed with the stakeholders during the rule development process, amounts to a give-away of the State's already scarce allowances to out-of-state sources over which the Department has no control. These jurisdictions were provided the same opportunity as New Jersey to ensure that their base emissions budgets were correctly defined. We fail to understand why the Department feels compelled to support the excess emissions of out-of-state sources to the detriment of the State's own sources. PSE&G is not aware of any other state that has proposed to include such a provision in its NO<sub>x</sub> Budget Rule. The proposed rule already imposes tougher compliance requirements on New Jersey sources than the proposed rules of other jurisdictions impose on their sources. The potential withdrawal of two percent of New Jersey's allowances to support less stringently regulated out-of-state sources only serves to further handicap New Jersey sources in a regional program whose intent was to level the environmental playing field between the jurisdictions of the OTC. We cannot support this provision and call for its removal from the rule. PSE&G opposes the proposed provision at N.J.A.C. 7:27-31.7(b)5i(4) that references N.J.A.C. 7:27-31.7(i). {14}

At N.J.A.C. 7:27-31.7(i)3, a thorough review of the State by State allocations has indicated that New Jersey is at a severe disadvantage as compared to other States due to the large amount of new sources installed here since the 1990 baseline was established. We should not consider transferring any of our already scarce allowances to any of the other States unless they have similar provisions for transferring allowances to New Jersey for similar cause. {7}

RESPONSE: The Department is maintaining its authority to transfer up to two percent of the base New Jersey budget to another jurisdiction within the OTC. The provision was

proposed in the spirit of interstate cooperation and on order to allow the Department to provide moderate aid if the integrity of the program was compromised for an unforeseen reason. The department recognizes the concerns regarding allocating allowances to companies in other states, which would have otherwise been allocated to New Jersey sources. Recognizing this concern, the Department would only implement N.J.A.C. 7:27-31.7(i) only in an extreme situation. The Department would consider implementation of this provision while concurrently encouraging other states to take similar steps in this regionally cooperative NO<sub>x</sub> reduction program, thereby minimizing the impact on New Jersey sources and spreading the impact in an equitable manner throughout the ozone transport region. The Department would also take such action if there was another agreement that would return allowances back to New Jersey at a later year and subsequently would be allocated back to the NO<sub>x</sub> Budget sources in New Jersey.

N.J.A.C. 7:27-31.8    Claims for incentive reserve allowances

112. COMMENT:    Regarding Demand Side Management (DSM), MPLP firmly believes that DSM should not be included in the NO<sub>x</sub> Budget allocation process. Being an effected source, it is extremely difficult to understand why any allotment of NO<sub>x</sub> allocations should be reserved for DSM when sources whose business rely on being able to operate may be severely harmed by not having sufficient allocations available to do so. Perversely, it appears that under the current proposed rule, DSM may be provided NO<sub>x</sub> allocations whereas some sources (utility, industrial, and IPP all included) may not receive sufficient allocations to continue to operate. Simply stated, MPLP does not believe DSM should receive any allocations under the NO<sub>x</sub> budget rule. It is also our impression after participating in every NO<sub>x</sub> workgroup meeting that the general consensus of the workgroup members agrees with this conviction. {13}

RESPONSE:    As mentioned in the response to comment #64, the allocation of incentive allowances is an integral part of the principles of allowances allocation, prevents the double counting of emission credits (within the OMET and NO<sub>x</sub> Budget Programs), and appropriately gives incentives for the conservation of energy and the environmentally beneficial generation of energy. The amount of allowances to be allocated through claims submitted under N.J.A.C. 7:27-31.8 is not expected to be significant enough to prevent budget sources from operating.

113. COMMENT:    At N.J.A.C. 7:27-31.8, the proposed rule places no limits on claims made against the Incentive Reserve. Although PSE&G is on record as a strong supporter of incentives to conserve energy, the unlimited aspect of the Incentive Reserve opens the door to depleting a base emissions budget which will be hard-pressed to sustain the compliance requirements of the State's existing budget sources. As proposed, Incentive claims can also impact the budgets of subsequent years. As such, claims against the Incentive Reserve will have a destabilizing effect on the State's base emissions budget year after year. For reasons previously discussed in our comments on N.J.A.C. 7:27-31.7, PSE&G strongly recommends that the Department place the following controls on the Incentive Reserve:
- a)    Inclusion in the proposed rule of a limit on the annual size of the Reserve--100 tons, for example--and on the claims made to this Reserve;



- b) Inclusion of a provision that proportionately returns, on an annual basis, any allowances remaining in the Reserve to the State's budget sources;
- c) Removal of the provision in the rule that allows for claims to the Incentive Reserve to be satisfied using allowances from the budgets for subsequent years. {14}

RESPONSE: As stated in response to comment #64, the Department is not placing a numerical limit on the number of allowances that can be claimed under this section.

114. COMMENT: At proposed N.J.A.C. 7:27-31.8(a), the provisions should reference (c)3, not (c)1. {1}

RESPONSE: The Department has corrected the error in citation upon adoption.

115. COMMENT: Regarding proposed N.J.A.C. 7:27-31.8(c), an issue regarding incentive allowances arises. The issue is that "persons" who participate in Demand Side Management programs are already subsidized by the NJBPU at the rate of approximately two cents per kilowatt-hour. In view of this subsidy, they should not be eligible for incentives under N.J.A.C. 7:27-31.8. Providing them with both allowances and BPU credits for DSM projects is a double payment for the same benefit. These "person" should continue receiving subsidies from the NJBPU Program. Participation in N.J.A.C. 7:27-31.8 should be limited to NO<sub>x</sub> Budget sources. The BPU process should be the primary vehicle for rewarding DSM in the consumer sector. The Incentive Reserve should be used for encouraging NO<sub>x</sub> reductions within the NO<sub>x</sub> Budget Program. {18}

Since the environmental benefit of demand-side management (DSM) projects is already recognized by the two cents per kilowatt-hour for environmental externalities provided to such projects by the BPU in its DSM regulations, DSM projects should not automatically be awarded the additional benefit of NO<sub>x</sub> allowances through the Incentive Reserve. Allowing both allowances and BPU credits for DSM projects is a double payment for the same benefit. Therefore, DSM projects should be allowed to receive either allowances or BPU credits, not both. {6}

RESPONSE: As mentioned in the response to comment #65, the establishment of an incentive by the Department (in addition to the BPU incentive) occurred when the Open Market Emission Trading Program was adopted at N.J.A.C. 7:27-30. The establishment of the ability for Demand Side Management Projects to received incentive allowances in this NO<sub>x</sub> Budget Program is, in part, to prevent the double counting of emission credits in both the NO<sub>x</sub> Budget Program and in the Open Market Emission Trading Program. Additionally, the NJBPU is currently recommending the kind of market based incentive provided by the incentive allowances or the OMET DERs for Demand Side Management Projects instead of a rate-payer based subsidy.

116. COMMENT: At proposed N.J.A.C. 7:27-31.8(c)2. Since “source” is defined as being an emitter of air pollutants, this is perhaps not the right term to use in the first sentence, since solar energy and wind power are included in the list to which it refers. {8}

RESPONSE: The Department agrees and has replaced “a source” with the general term “equipment.”

117. COMMENT: The Department received the following comments regarding which of the two proposed measurement protocols options should be selected for the quantification of energy savings through energy efficiency projects eligible to claim incentive allowances as proposed at N.J.A.C. 7:27-31.8(c) and (g):

Regarding the two alternative protocols in N.J.A.C. 7:27-31.8(c)1ii and (g)1 for quantifying electricity consumption savings, in both cases, PSE&G favors the use of Alternative 2, “International Performance Measurement and Verification Protocol (IPMVP) for Accrediting Emission Reductions for Energy Efficiency”. {14}

The New Jersey Measurement and Verification Protocol (NJMVP) (the actual title of the document is “Measurement Protocol for Commercial, Industrial and Residential Facilities” May, 1993) as referenced in the proposal at N.J.A.C. 7:27-31.8(g)1 and elsewhere should be used instead of the International Performance Measurement and Verification Protocol (IPMVP) for measuring savings from energy efficiency. The two protocols have different purposes: the NJMVP is meant to deliver a firm Demand Side Management resource to utility and to protect ratepayers; the IPMVP is meant to gather Measurement & Verification (M&V) methods in one protocol to increase investor confidence in EE and to lower EE interest rates for project financing. The purposes of the NJMVP are closer to the necessities of emission trading, since they strive for zero error tolerance. The two are organized differently: the NJMVP is categorized by end use type, the IPMVP by measurement type. The NJMVP organization allows the protocol to be prescriptive, i.e. to say which measurement system is best for each end use type. That kind of prescriptive comparison is impossible in the IPMVP, even though it contains all the methods of the NJMVP. The two protocols are used by different audiences: since the NJMVP was developed in New Jersey, it is used by all customers in New Jersey who have implemented energy efficiency projects that are measured. The IPMVP has a much broader geographical range by a much more diverse audience. As a result, all the projects that would be applying for allowance allocation in New Jersey would be using the NJMVP and not the other. For all these reasons and some others not listed here, we recommend the use of the NJMVP for the purposes measurement and verification of energy savings for claims upon the NO<sub>x</sub> Budget Incentive allocation in New Jersey. {4}

RESPONSE: After consideration of the comments on the two protocols, the Department has selected the New Jersey Board of Public Utilities protocol. The two primary reasons for this selection are: 1) the prescriptive nature of which measurement techniques are acceptable for specific energy conservation techniques and 2) the protocol is already being applied in New Jersey and is therefore more likely familiar to the companies in New Jersey who would use a protocol.

118. COMMENT: The Department received the following comments regarding proposed N.J.A.C. 7:27-31.8(c)1ii:

The final rule could state that only DSM projects implemented after 1998 are eligible to receive NO<sub>x</sub> allowances. As it is presently written, DSM projects are eligible if they were implemented in 1992 or later. {10}

It is not appropriate or necessary to base their incentives on projects that have been in place since 1992. The Department should impose a post-1998 break point after which DSM programs could allow for allowances. {9}

The final rule should state that only DSM projects implemented after 1998 are eligible to receive NO<sub>x</sub> allowances. The draft rule allows DSM projects to be eligible if they were implemented in 1992 or later. {6}

RESPONSE: The year 1992 was chosen because DSM projects implemented by this year are eligible for DER credit generation under the open under the Open Market Emission Trading (OMET) Program. Without a consistent date with what is creditable in the OMET program, the prevention of double counting of emission credits would be compromised.

119. COMMENT: At proposed N.J.A.C. 7:27-31.8(f)(2), reference should be made to “(g) below,” not “(e) below.” {1}

RESPONSE: The Department has corrected this error upon adoption.

120. COMMENT: N.J.A.C. 7:27-31.8(g)1 states that the energy efficiency guidance documents used to calculate the amount of electricity claimed to be saved will be incorporated by reference. New Jersey should include a copy of whichever energy efficiency guidance document is adopted under the final rule with the official State Implementation Plan (SIP) submittal. {1}

RESPONSE: The Department will include the referenced measurement protocol at part of the revision to New Jersey’s State Implementation Plan that incorporates the NO<sub>x</sub> Budget Program.

121. COMMENT: Proposed N.J.A.C. 7:27-31.8(g)2 appears to indicate that a change in the quality of the energy consumption (e.g. simply reducing light levels or increasing the thermostat in the summer from 68 °F to 72 °F) does not create a claim for allowances. The measurement protocols (either Alternative 1 or Alternative 2) already address this by measuring only improvements in electric efficiency. Therefore, this provision is unnecessary, and should be removed. {14}

RESPONSE: The Department agrees that the provisions proposed at N.J.A.C. 7:27-31.8(g)2 is both not clear in its intent and not necessary in light of the measurement protocol. The Department agrees that the application of the measurement protocol precludes the crediting of energy savings for decreased function of energy (like in the examples provided in the

comment) and that only improvements of the energy efficiency would be creditable for claims made under (c)1. Accordingly, the Department has removed this provision upon adoption.

122. COMMENT: The filing date for end of season reporting of total claims of emission reductions from energy efficiency does not allow sufficient time for applicants to submit data and should be changed. N.J.A.C. 7:27-31.8(h) states that “A claim shall be submitted to the Department of October 15 of the year in which the control period occurred on which the claim is based ...” This date is too soon after the ending of the ozone season (September 30) to allow collection and tabulation of data. If the Reserve method of claims is used [Alternative 1 at N.J.A.C. 7:27-31.7(c)3ii], then the claim deadline should be October 30. If, as we will advocate, the Alternative 2 is adopted (referred to above as the “Draw Forward” method), then we would advocate use of the energy savings from the summer of 1998 for claims upon the 1999 ozone season (and year 1999 savings for the year 2000 ozone season, etc.); and we would advocate that the claim deadline for the 1998 (or other year previous) should be December 15 for claims upon the following ozone season. {4}

RESPONSE: The Department agrees that the date proposed provided insufficient time to submit claims for incentive allowances. The Department has therefore changed the date from October 15 to October 30 to be consistent with the date by which budget sources are required to submit operating data to the NO<sub>x</sub> Emission Tracking System (NETS) through an electronic data report (EDR).

123. COMMENT: The rule should allow for aggregation of energy efficiency claims for the Incentive. Energy efficiency is made up of many projects undertaken at geographically diverse commercial, industrial and governmental facilities. At the rate of 1.5 lbs NO<sub>x</sub> / MWh, a facility would need to save just under 1.4 million kWh per ozone season to get one allowance. Over 96 percent of eligible projects save fewer than 1.4 million kWh in one ozone season. Restricting allowances to the four percent that are of sufficient size to make their own claim would destroy the integrity and the usefulness of the Incentive program. The solution is to allow aggregation of claims. This would work by allowing an aggregator, such as a utility or a third party, to aggregate the customer savings quantities and to apply on behalf of all aggregation member facilities. From the perspective of the Department, there would be one MWh total submitted by the aggregator and one allowance total given to the aggregator. The amount of NO<sub>x</sub> emission reduction lost due to claims submitted for partial tons would always remain less than one ton. Emissions aggregation raises two questions: 1) Who owns the allowances? 2) How can the Department avoid double-counting of emission reductions? In answer to the first question, the aggregator would need to prove that they had the facilities’ permission to apply on their behalf. Ownership would then be a contractual matter between the facility and the aggregator. In answer to the second question, a list of facility addresses would need to be maintained to ensure against the same energy savings being claimed more than once. This could be done by maintaining a project list and checking off projects that had already made claims that had been accepted. That would eliminate the possibility of double-counting. The aggregator would encapsulate the complexity of the aggregated group, freeing the Department from the

administrative burden; the Department, however, would have access to key information they need in order to manage the process. {4}

RESPONSE: The rules adopted herein do not preclude the submittal of a claim on behalf of the owner or operator of project eligible for submitting a claim. Neither do the rules preclude aggregating claims of several different projects in a single claim. The Department agrees that proof of permission from the owners and operators of the projects and that a complete and detailed list of the individual projects would need to be included in such an aggregated claim.

124. COMMENT: One of the most innovative sections of the proposed rule is the approach taken to Incentives earned by “Environmentally Beneficial forms of Electric Generation”. This allows qualifying renewable generation and electric energy efficiency to earn allowances for emissions reduced. This rule is not the first to propose such a program, but it makes considerable improvements over all the predecessors. The most well-known of these is the Conservation and Renewables Reserve (CRER) in the Acid Rain Program. The CRER is not an effective incentive, if history is a judge. For example, the CRER does not serve to encourage energy efficiency, because the benefit of the incentive goes to the utilities, not to the end users who implement the efficiency measures. New Jersey’s proposed rule explicitly allows the electric end user to collect the allowance for efficiency actions. Secondly, the CRER relies on the Measurement and Verification protocols in the “CRER Handbook” which use gross estimates of energy savings. The New Jersey proposal relies on measurement and verification from the New Jersey Measurement and Verification Protocol, which requires *in situ* metering of actual energy savings, yielding accurate information that eliminates guesswork. Finally, like the CRER, the New Jersey Incentive is based on a standard emission rate which is far below the average marginal rate for the power pool. This makes the program easier to administer and ensures that allowances are earned at a rate similar to New Source Performance Standards, so that excessive credit is not given to reward marginal generation units that are above NO<sub>x</sub> Budget emission rate targets. {4}

RESPONSE: The points raised in this comment also support the selection of the New Jersey Measurement and Verification Protocol by the Department for use in quantifying energy efficiency eligible for claiming incentive allowances.

#### N.J.A.C. 7:27-31.9 Permits

125. COMMENT: New Jersey should clarify how sources (minor sources) not subject to the operating permits requirements under N.J.A.C. 7:27-22 will incorporate all applicable requirements and provisions of Subchapter 31 in their permits. {1}

RESPONSE: The nature of the Title V Operating Permits (promulgated at N.J.A.C. 7:27-22) require the incorporation of each and every applicable emission limitation and condition of operation (including any applicable requirements of this NO<sub>x</sub> Budget rule) into the Operating Permit. Budget sources that are not subject to the Operating Permit rules will be required to meet all requirements and conditions of the NO<sub>x</sub> Budget program (pursuant to this rule) as well

as any requirements and conditions established in a permit to construct and/or certificate to operate issued by the Department in accordance with N.J.A.C. 7:27-8 (Subchapter 8). This is the case even though the Subchapter 8 permit does not specifically reference the NO<sub>x</sub> Budget requirements. However, any Subchapter 8 permits issued by the Department as of the effective date of this rule will likely reference the NO<sub>x</sub> Budget requirements.

126. COMMENT: Proposed N.J.A.C. 7:27-31.9(b) states that even if there are sufficient budget allowances to cover actual emissions, those emissions “are not authorized...if they would contravene an applicable NO<sub>x</sub> emissions standard established at N.J.A.C. 7:27-19, a permit limit, or any other emission limit that applies to the budget source”. This provision could be read in different ways. It could be seen as simply stating that there is nothing in this rule that allows the exceedance of a standard in another rule, even if there might be provisions of other rules which do allow this. Another interpretation, however, would be that a source is precluded from exceeding a ‘rule RACT’ standard, now that it was in the budget program, even if there might be another compliance alternative such as an Alternative Emission Limit (AEL) or open market emission trading under Subchapter 19 and/or 30. The Department is asked to clarify the intent of this section. It is certainly hoped that all compliance options to meet RACT will still be allowed, including OMET trading (albeit in a restricted fashion because of the lack of an interface). {8}

RESPONSE: The Department has amended this provision to clarify that allowances may only be used to demonstrate compliance with the NO<sub>x</sub> Budget Program and may not be used to comply with any other applicable NO<sub>x</sub> emission limit. This provision does not negate any options to comply with other applicable NO<sub>x</sub> emission limits.

127. COMMENT: Proposed N.J.A.C. 7:27-31.9(d) appears to state that amended or modified Operating Permit applications which address the requirements and provisions of the rule must be submitted within 90 days of the operative date of the final NO<sub>x</sub> Budget Program rule. According to proposed N.J.A.C. 7:27-31.9(a), the Operating Permit must be modified to include:

- a. Provisions that each source will hold sufficient allowances in its compliance account to cover its emissions for the current control period;
- b. Information on the designated Authorized Account Representative;
- c. Information on monitoring and reporting as per N.J.A.C. 7:27-31.14 and 31.16, respectively.

PSE&G sees a potential timing conflict between N.J.A.C. 7:27-31.9(d) and item c above. As per N.J.A.C. 7:27-31.14(b), monitoring plans must be submitted to the Department by the operative date of the final NO<sub>x</sub> Budget Program rule. However, these monitoring plans may not yet be approved by 90 days after the operative date of the final rule, which is the deadline for submitting amended Operating Permit applications under the proposed rule. Because the monitoring and reporting provisions are an important component of the NO<sub>x</sub> Budget Program, the Department should provide in the final rule a mechanism to allow additional time to submit amended Operating Permit applications if the monitoring plans have not yet been approved. Otherwise, it would be premature to submit amended Operating Permit applications. This is

neither in the Department's or the permittee's interest. Indeed, in a realistic worst-case scenario, more than one amendment to the Operating Permit application would be necessary.

PSE&G also believes that if an Operating Permit has already been issued for a budget source, then the incorporation of NO<sub>x</sub> Budget requirements should be considered an Administrative Amendment to the permit per N.J.A.C. 7:27-22.20, and that this Subchapter 22 provision should be revised accordingly. {14}

RESPONSE: The Department agrees that the proposed N.J.A.C. 7:27-31.9(d) was insufficient in both the amount of time and in the details regarding the procedure by which relevant NO<sub>x</sub> Budget requirements must be incorporated into an operating permit in the cases where an operating permit application has already been submitted to the Department. The Department has therefore amended this provision to allow the necessary operating permit forms to be submitted by 90 days after approval of the monitoring plan. The Department has specified that if the operating permit approval is still pending then the permittee shall submit an update to the original operating permit application. If the operating permit has already been issued, then the incorporation into the operating permit of the overall requirements to comply with the NO<sub>x</sub> Budget Program rules as listed at N.J.A.C. 7:27-31.9(a) may be accomplished through a seven-day notice, a significant modification or a renewal.

Lastly, this requirement only addresses the incorporation of the general requirements of the NO<sub>x</sub> Budget Program. Any changes to monitoring equipment, installation/modification of control apparatus, or any other operational changes made in order to demonstrate compliance with the NO<sub>x</sub> Budget Program must be incorporated into the operating permit according to the scope of the change pursuant to the operating permit rules at N.J.A.C. 7:27-22. The Department added N.J.A.C. 7:27-31.9(f) upon adoption to provide this clarification within the NO<sub>x</sub> Budget rule.

128. COMMENT: N.J.A.C. 7:27-31.9(e) indicates that an opt-in source must incorporate the opt-in approval of the source into the facility's operating permit. This section further states that this shall be done through the initial application for the operating permit, through a seven-day notice or an application for a minor modification or significant modification, or through an application for a renewal, whichever applies pursuant to Subchapter 22. New Jersey should revise this provision to clarify that the incorporation of the NO<sub>x</sub> Budget requirements for an opt-in source into a facility's operating permit is a new applicable requirement and therefore should not be processed as a minor modification or administrative amendment. {1}

RESPONSE: The Department agrees that in almost every conceivable case, an operating permit would need to undergo a significant modification (or renewal) in order for the provisions of the operating permit to adequately contain all of the requirements necessary to demonstrate full compliance of an opt-in source with the NO<sub>x</sub> Budget Program. However, there may be cases where a source is opted-in to the Program and no changes to monitoring systems, control equipment or other operational changes are needed. In such a case, only the administrative details of compliance with the program would need to be included in the operating permit (such change could be accomplished through a seven-day notice). The provisions of the Operating Permit Rules also allow any permit change that could be submitted as a seven-day notice to be submitted as a minor modification, pursuant to N.J.A.C. 7:27-22.22(n). Accordingly, no

revision to this provision is needed and this response serves as clarification. The provision specifies that if the changes to the opt-in source are significant enough to warrant the amendment of the operating permit through a significant modification, then a significant modification would need to be submitted.

N.J.A.C. 7:27-31.10 Allowance use, transfer and retirement

129. COMMENT: N.J.A.C. 7:27-31.10(c) should be revised to recognize that the freeze on current and past-year allowances will probably extend beyond January 31 of each year. EPA currently estimates that this freeze will last from the transfer deadline through late February. {1}

RESPONSE: The Department is clarifying the rule to be consistent with the time period during which current year allowances may be transferred. It is the Department's understanding that the reason this process will take more than one month is that the emissions data must be quality assured before the reconciliation process takes place. The Department is also clarifying in the rule that the freeze on allowance transfers during the reconciliation process only applies to allowances that have serial numbers indicating that such allowances could be used for compliance during the reconciliation process. For example, the reconciliation process during which allowances are used to authorize the emissions of NO<sub>x</sub> during the control period in the year 2000 would begin January 1, 2001 and would end as soon as possible (approximately February). During this period allowances having serial numbers indicating the years 1999 and 2000 would be frozen and would not be transferrable. Also during this period any allowances having serial numbers indicating the years 2001 or later would not be frozen and would still be able to be transferred.

130. COMMENT: Proposed N.J.A.C. 7:27-31.10(c) and (l) permit the transfer and retirement of allowances only between January 31 and December 31. This window effectively imposes a freeze on any account activity, including allowance trading, from January 1 through January 30. PSE&G fails to see sufficient purpose for this account freeze and calls for its removal for the following reasons:

First, it is inconsistent with the OTC Model Rule, which states that allowances may be bought, sold, or traded at any time, and does not mention an account freeze as a requisite component of the allowance transfer and retirement provisions.

Second, while the Department may wish to freeze accounts temporarily for the purpose of administrative convenience during the year-end compliance inventory, we feel that this inventory can be easily and accurately conducted without restricting the ability of budget sources to participate in allowance trading for an entire month. Allowances are sufficiently labeled, numbered, and otherwise tracked, reported, and identified to provide the Department with adequate control over the year-end compliance inventory without interrupting the transfer of allowances.

Third, the beginning of a new calendar year presents budget sources with a key opportunity to stake an early claim in a competitive allowance market and take advantage of potentially favorable allowance prices and other conditions associated with a new year in any



type of market. The Department's proposed account freeze gives budget sources in states which follow the OTC Model Rule a one-month lead over New Jersey budget sources at a critical time in the trading year. {14}

RESPONSE: The Department is maintaining the allowance transfer freeze on allowances that could be used for reconciliation during the entire reconciliation period. This period will likely be longer than just one month. Although the model rule did not mention a freeze on the transfer of allowances during the reconciliation process, such a freeze is a necessary reality during which data from the NO<sub>x</sub> Allowance Tracking System (NATS) and the NO<sub>x</sub> Emissions Tracking System (NETS) are correlated. The model rule was developed before these systems were fully envisioned and did not address the reality of the reconciliations process which requires the allowances that could be used for compliance purposes to be frozen so that the reconciliation process can be completed. The information associated with each allowance and account allows the correct population of allowances to be frozen so that the NATS administrator is able to transfer allowances into the retirement accounts without the possibility that allowances would be transferred after the allowances transfer deadline. Only the allowances held in compliance accounts that could be used during the ongoing reconciliation process would be frozen, and allowances in general accounts are not restricted from being transferred into other general accounts and allowances with future year serial numbers would also have no transfer restrictions during the reconciliation process. This clarification is adopted in the rule and would allow companies the ability to take advantage of allowance trading during any time in the year.

131. COMMENT: N.J.A.C. 7:27-31.10(c)2 requires a paper flow to document the exchange of allowances between sources located on the same site and operated by a single owner. The system of transactions is designed to create a commodity which can be bought or sold. An onsite balance of allowances between sources may not involve either a currency exchange or a change in ownership of the allowance. TOSCO suggests deletion of this provision. {22}

The paperwork flow defined in N.J.A.C. 7:27-31.10(d) should not be required when ownership of the allowance is not being transferred and the allowances are being exchanged onsite. These exchanges should only be documented in the year end reconciliation. {22}

RESPONSE: The transfer of allowances from any individual account to any other account must be requested and must be documented through an allowance transfer request. Without a transfer request, a transfer cannot be made or accounted. This procedure is a simple one and is similar to requesting the transfer of monetary funds between two commonly owned accounts at a bank. The procedure is essential for the proper tracking of allowance transfers.

132. COMMENT: New Jersey should consider revising the procedures under N.J.A.C. 7:27-31.10(d) given there will be one transfer form across the OTC to cover transfers between and among compliance and general accounts. Specifically, in N.J.A.C. 7:27-31.10(d)2ii, the OTC's transfer form does not require the address of originating and acquiring accounts. It requires just the name, phone and fax. Also, N.J.A.C. 7:27-31.10(d)3i and ii seem to indicate that there are two different certification statements on the allowance transfer form or two different forms, one

for compliance accounts and one for general accounts, when there will actually be only one certification statement and one form. This certification statement will read “I am authorized to make this submission on behalf of the owners and operators of the budget source or on behalf of the parties with an ownership interest with respect to the allowances held for which the submission is made. I hereby certify...”. Wording has been added to the transfer form to ensure the certification statement is extended to include transfers from general accounts. {1}

RESPONSE: The Department agrees and has corrected the rule to be consistent with the single region-wide allowance transfer form. The transfer form does contain fields for the address of both the originating account and the account to which the allowances are being transferred. Therefore, the Department is keeping the requirement to include the relevant addresses in the allowance transfer form. The Department has corrected the certification language to reflect the language used on the form.

133. COMMENT: N.J.A.C. 7:27-31.10(k) indicates that interstate and interjurisdictional trades are allowed if the other jurisdiction has also adopted rules which allow the interstate trading of allowances and is implementing a NO<sub>x</sub> Budget Program, in a manner consistent with the agreements in the OTC MOU. New Jersey should provide some discussion and/or criteria for what is meant by “...a manner consistent with the agreements in the OTC MOU.” The questions which arise is who determines consistency and how. Does this suggest that rule consistency is contingent upon EPA approval of each State’s NO<sub>x</sub> Budget SIP revision? If this is so, trades could go forward prior to EPA approval, but such trades may later be disallowed if a state’s rule is not approved by EPA. {1}

RESPONSE: This subsection was proposed based on the provision in the model rule: “The trading of allowances between budget sources in different states for purposes of compliance, is contingent upon the adoption and implementation by those states of comparable and consistent NO<sub>x</sub> Budget Program regulations.” This section is intended to prescribe the fact that the NO<sub>x</sub> Budget Program in a regional program being implemented by the regulatory bodies within the Ozone Transport Commission. This provision does not suggest that the inter-state trading of allowances is prohibited until the EPA approves each and every States NO<sub>x</sub> Budget Rules as part of each state’s SIP. Trades may go forward at any time provided they are valid transactions and all of the required forms are submitted to the NATS Administrator. Only in the case where a State’s NO<sub>x</sub> Budget Rule is fundamentally contrary to the NO<sub>x</sub> Budget Program would interstate trading be prohibited. In such a case, the EPA would most likely disapprove the state’s rules. This case is extremely unlikely as states are currently finalizing their rules in a manner consistent with the principles and practices of the NO<sub>x</sub> Budget Program. However, there may be other cases where EPA does not give final full approval of a state’s SIP revision for more trivial reasons. In these cases, no prohibition of interstate allowance trading would occur. This provision is adopted to address an extremely unlikely (but possible) scenario. The Department expects that any prohibition of interstate trading will never take place.

134. COMMENT: Proposed N.J.A.C. 7:27-31.10(k) allows the interstate and interjurisdictional transfer of allowances. N.J.A.C. 7:27-31.10(k) goes on to state, however, that the transfer of allowances to another jurisdiction is prohibited until that jurisdiction is implementing a NO<sub>x</sub> Budget Program in a manner consistent with the agreements in the OTC MOU.

PSE&G understands that the Department's intent is to ensure that allowance trading between jurisdictions takes place on a level playing field. We share the Department's concern that differences in the Budget Programs between states and jurisdictions may create inequities in allowance trading. These differences, however, are already becoming evident in the proposed rules of various states. We would like to address several differences which, if allowed to stand, would detract from equitable allowance trading.

The most crucial difference exists in the allocation methods proposed by the Department as opposed to those proposed by other states. Among the unique features of New Jersey's allocation methods are the following:

- a) Budget source allocations must be recalculated annually at the close of the control period. As such, New Jersey budget sources will have no way of knowing, until after the control period, the degree to which they will be able to participate in allowance trading. Even then, they cannot be certain of their allocations until the Department's proposed allowance allocation date of December 15th. In the meantime, states such as Massachusetts, whose budget sources are on fixed allocations and therefore know their allocations prior to the control period, will have had most of the year to 1) develop their compliance strategies and 2) participate in allowance trading.
- b) The unlimited ability of the Incentive Reserve to draw allowances from New Jersey's base emissions budget will require State budget sources to "ratchet down" their annual allocations pursuant to the equations in N.J.A.C. 7:27-31.7(e)4 depending on the volume of Incentive claims. This "ratcheting down" effectively reduces the allowances allocated to the State's budget sources, exposing these sources to the need to turn to the open market for allowances. The proposed rules of states such as Massachusetts and Pennsylvania do not include these "ratcheting down" provisions. As such, the budget sources of these states will be less compelled than New Jersey sources to purchase out-of-state allowances. We feel that this imbalance could easily hold New Jersey sources hostage to inflated out-of-state allowance prices.

We offer these comments to the Department as further indication of the consequences of a regionally inconsistent rule, and as further justification for a final rule which is consistent in both its principles and provisions with the OTC Model Rule and the rules of neighboring jurisdictions. { 14 }

RESPONSE: The fact that New Jersey is allocating allowances in a manner different than other states does not hinder interstate trading of allowances. Regarding the first feature mentioned in the comment, the vast majority of allowances will be allocated each year, before the ozone season begins; there will only be an uncertainty of who receives approximately 10 percent of the allowances until November 30. This will still allow one month to complete any remaining transactions. The fact that a small portion of the New Jersey Budget will not be allocated until the end of the year does not prohibit sources from trading allowances. Regarding the second feature mentioned in the comment, the allocation of incentive allowances does not remove such allowances from the market. These allowances are part of the market and the owners of such allowances have complete control to make allowance transfers at will.

The allocation of incentive allowances does not force New Jersey budget sources from obtaining allowances from out-of-state budget sources.

N.J.A.C. 7:27-31.11 Allowance banking

135. COMMENT: At N.J.A.C. 7:27-31.11(c), please provide a definition for the term “total regional base emission budget” as used in this section. {7}

Proposed N.J.A.C. 7:27-31.11(c) mentions a “total regional base emission budget” but does not define whether “regional” is meant to include the entire OTR or is intended in some other way. PSE&G recommends that the Department more clearly define “total regional base emission budget.” {14}

RESPONSE: The total regional base emission budget as used in this section refers to the total number of allowances as authorized to be allocated through the application of the MOU calculations to the OTC Baseline and as provided for in each States rule. The term “base emission budget” is also defined at N.J.A.C. 7:27-31.2.

136. COMMENT: Regarding the calculation of the number of banked allowances at N.J.A.C. 7:27-31.11(c) and (d), PSE&G requests clarification that the 4,822 allowances the Department intends to place in a “general discretionary account” (referred in the proposed allocation method for 2003 and beyond) do not count towards the calculation to determine if banked allowances constitute more than 10 percent of the total regional base emission budget. To include these allowances in the calculation would unfairly penalize sources throughout the entire OTR. The total regional base emission budget is approximately 145,000 tons for 2003 and beyond. Ten percent of this total is 14,500 tons. The 4,822 tons removed by the Department alone would represent over 3.3 percent of the total regional base emissions budget, leaving less than 6.7 percent (9,678 tons) for the rest of the region before the more stringent banking provisions are triggered. Within three years, the Department’s general discretionary account will have accrued to the point where it alone will consume 10 percent of the entire regional base emissions budget. {14}

RESPONSE: The Department will not retain a large number of serialized allowances in the “attainment reserve account” in a manner that effectively skews the progressive flow control calculations by treating a large number of allowances that are effectively out of the market as banked allowances. The Department is currently exploring the two ways the “attainment reserve” account could currently be established in the NO<sub>x</sub> Allowance Tracking System. The first way is to keep the 4,822 allowances in an “authority account.” This kind of account is for a regulatory entity gives it the authority to create a specific number of allowances, before they are assigned serial numbers. If the allowances in an authority account are not created (that is assigned serial numbers) by the end of the year, the authority expires and what would have become allowances are effectively retired. If the Department chooses this way to setup the authority account, then only those allowances used for a purpose other than retirement would be created and allocated (see N.J.A.C. 7:27-31.3). Otherwise the “allowances” would be retired automatically by the end of the year. The second way the “attainment reserve” could

currently be setup is to create the allowances (that is assign them serial number) and place them into a separate holding account. In this case, the Department would need to retire the allowance by the end of the year to prevent them from being counted as “banked” allowances in the progressive flow control procedures. In either case, the Department will assure that any allowances remaining in the “attainment reserve” account will be retired by the end of the year to prevent allowances that are not part of the market from being counted as “banked” allowances.

137. COMMENT: Proposed N.J.A.C. 7:27-31.11(c) states that, by March 1 of each year, the NATS Administrator will determine whether the total number of allowances banked in the NATS as of January 1 exceeds ten percent of the total regional base emission budget. Proposed N.J.A.C. 7:27-31.11(d) states that banked allowances in excess of ten percent of the budget must be used at a 2:1 rather than 1:1 ratio.

PSE&G is concerned about this two month time lag and would like to see a mechanism established whereby account holders can more closely monitor the amount of banked allowances in the region. This will enable account holders to make more well-informed and timely decisions about unit operations and allowance utilization. {14}

RESPONSE: The progressive flow control announcement by March 1 of each year provides notice ten months before the relevant allowance transfer deadline. For example, the progressive flow announcement by March 1, 2000 would give notice regarding the disposition of any banked allowances (having serial numbers with the year 1999). Sources would have ten months advanced warning regarding what percentage of banked allowances would need to be used at a 2:1 ratio if they are used to demonstrate compliance for the year 2000 control period. For clarification, only a portion of banked allowances (rather than all banked allowances) would need to be used on a 2 to 1 ratio if the ten percent threshold of banked allowances is exceeded. Additionally, NATS information will be able to be accessed by computer through the World Wide Web. If one were inclined to estimate the state of the bank before March 1, one could download the emissions and allowance data from the World Wide Web and process the information.

138. COMMENT: Regarding N.J.A.C. 7:27-31.11(d): On March 1 of each year, the NATS administrator determines if banking constraints will be necessary in the coming control period. Implementing the constraints entails applying a calculated ratio to the banked allowances in each account to determine which can be used on a one-for-one basis and which will be used on a two-for-one basis. Exactly when the administrator will apply the ratio? Is it at the time that the ratio determination is made, prior to March 1 and the control period for that year, or after the control period is over, during the reconciliation of allowances? {8}

RESPONSE: The ratio will be applied after the control period during the reconciliation process and only on all such banked allowances that are being used to authorize the emissions of NO<sub>x</sub>. This is prescribed at N.J.A.C. 7:27-31.17(g). Therefore, the Department has added this reference to this provision upon adoption. For example, if a banked allowance is not used to authorize emissions during the year 2000 and is continued to be “banked” for another year,

such an allowance would not be discounted for the year 2000 regardless of the state of the bank during the year 2000.

139. COMMENT: TOSCO recommends deletion of N.J.A.C. 7:27-31.11(d). This requirement for banked emissions to be used on a two-for-one basis should only apply, at the most, to facilities who participate in the market, i.e., sell allowances. This requirement complicates the planning of operations, facility shutdowns and inventory planning. Therefore, if an operator never sells an allowance but uses banking to compensate for year variations in productions, the banked emissions should not be discounted. In this case, only emissions offered for sale should be considered for discount. In many cases the use-it-or-lose-one-of-it philosophy is counter productive to reducing ozone season emissions. An operator must sell allowances or increase production rate to use up banked emissions before the end of the ozone season or lose on-half of the banked production rate or banked value of the allowance. The Department should take the position that a ton of emissions in the bank is a ton of emissions removed from the environment. Long-term banking of emissions should be encouraged rather than discounted. {22}

RESPONSE: The Department is retaining the progressive flow control provisions as they are an integral part of the NO<sub>x</sub> Budget Program as established in the model rule. The NATS will not treat a banked allowance that has been transferred into an account through trading any differently than a banked allowance that was transferred into an account through allocation by a state. The way the progressive flow control works encourages long-term banking of allowances in that the more allowances that are banked in an account, the more allowances can be used on a one-for-one basis during progressive flow control. Progressive flow control encourages long-term banking of allowances because it affects the price of using a banked allowance rather than limiting the life time of the allowances.

140. COMMENT: At N.J.A.C. 7:27-31.11(d), the Department received two comments regarding which banked allowances would need to be used on a two-for-one basis:

All banked allowances should not be discounted if the bank reaches a level of 10 percent of the total regional base emission budget. The discount should only be applied against the utilization of banked allowances during periods in which overall utilization of the regional bank reaches of level of 10 percent of the total regional base emission budget. {7}

The proposed rule does not discriminate between allowances which were submitted prior to the 10 percent banked allowances limit and those which were submitted after the limit was exceeded. This creates the possibility that a budget source which submitted its allowances prior to the achievement of the 10 percent limit may be subjected to the 2 to 1 ratio. PSE&G believes that a mechanism should be established, based on the date and time that the allowance was banked, to determine which allowances will be subjected to the 2 to 1 ratio and which will be subject to the 1 to 1 ratio. The proposed rule also does not state how allowances are to be labeled at the time of sale to indicate whether they have a use ratio of 1:1 or 2:1. We further propose that the Department include such a labeling provision in N.J.A.C. 7:27-31.11 or another appropriate section. {14}

RESPONSE: All banked allowances will not be discounted in the number of banked allowances in the regions exceeds 10 percent of the total regional budget; only a specific percent of banked allowances in each compliance account which are actually used to authorize NO<sub>x</sub> emissions will be used at a two for one basis. No individual allowance will be labeled for use at a 2:1 or a 1:1 ratio. The following example is provided to clarify how the progressive flow control ratio will be implemented:

In the year 2000, the NATS administrator determines that the total number of banked allowances is 20 percent of the total regional budget (for example, the total regional budget is 220,000 allowances and the total number of unused allowances with a 1999 year serial number which have not been used or retired after reconciliation of 1999 emissions is 44,000). By March 1, 2000, the NATS Administrator will announce that one half of all banked allowances in each individual compliance account may be used to reconcile emissions during the control period of the year 2000 on a one-for-one basis and any further amount of banked allowances used to reconcile emissions in the year 2000 would be used on a two-for-one basis. At the beginning of the control period, Source ABC has 20 “banked” allowances (that is 20 allowances with a year 1999 serial number) and 40 “current year” allowances (that is 40 allowances with a year 2000 serial number). Without trading, up to 50 allowances could be used on a one-for-one basis to authorize NO<sub>x</sub> emissions during the control period (40 current year allowances, and one half of 20 banked allowances), and the remaining 10 allowances (if used) would be used on a two-for-one basis. Therefore, without trading, the source could emit up to 55 tons of NO<sub>x</sub> during the control period of the year 2000 and would have enough allowances to authorize such emissions. In July, the source purchased 20 additional “banked” allowances (that is allowances with a year 1999 serial number). At this point of time, without any further trading, up to 60 allowances could be used on a one-for-one basis to authorize NO<sub>x</sub> emissions during the control period (40 current year allowances, and one half of 40 banked allowances), and the remaining 20 allowances (if used) would be used on a two-for-one basis. The source emitted a total of 65 tons of NO<sub>x</sub> during the control period. Without any further trading, 70 allowances would be used to authorize the emissions of Source ABC (40 current year allowances and 30 banked allowances). In order to avoid using any banked allowances on a two for one basis, the source could purchase at least five more current year allowances or could purchase at least ten more banked allowances before the allowance transfer deadline of December 31.

N.J.A.C. 7:27-31.12 Early reductions

141. COMMENT: Proposed N.J.A.C. 7:27-31.12 contains no provisions for the protection of information which a budget source may consider proprietary and highly confidential. We strongly recommend that the Department include provisions to protect information which budget sources consider proprietary. At a minimum, a reference to the confidentiality provisions of N.J.A.C. 7:27-1 would be appropriate. {14}

RESPONSE: The Department has added a reference the confidentiality provisions upon adoption. The Department has added this reference at N.J.A.C. 7:27-31.3(o) “Applicability and General Provisions.”

142. COMMENT: There is a typographical error in proposed N.J.A.C. 7:27-31.12(c)1. This provision should refer to the “rated” heat input capacity, not the “rate” heat input capacity of a unit. {14}

RESPONSE: The Department has corrected this error upon adoption.

143. COMMENT: Proposed N.J.A.C. 7:27-31.12(c)9 and (j) authorize the owner or operator of a budget source to estimate the level of inaccuracy and uncertainty in calculating its early reduction credits. These provisions further authorize the owner or operator to apply an adjustment factor to account for possible inaccuracies in the calculation. PSE&G believes that these provisions must be eliminated because they provide owner or operators too much discretion to arbitrarily adjust their early reduction calculations. We believe that N.J.A.C. 7:27-31.12(c), which requires certification pursuant to N.J.A.C. 7:27-1.39 as to the truth, accuracy, and completeness of the information submitted to support an early reductions claim, provides appropriate assurance to the Department that the information submitted is true, accurate, and complete. {14}

RESPONSE: The Department has amended the provision at N.J.A.C. 7:27-31.12(c)9 to provide that only significant inaccuracies or uncertainties would need to be accounted for in the early reduction calculations. The Department has deleted the provision at (j) because (c)9 and the certification of the information is sufficient. The Department has reserved (j) in order to preserve the citation of the remaining provisions in the section.

144. COMMENT: There is a typographical error in proposed N.J.A.C. 7:27-31.12(e)1. The word “the” should be removed from the expression “this rate shall be the expressed in pounds per MMBtu...”. {14}

RESPONSE: The Department has corrected this error upon adoption.

145. COMMENT: At N.J.A.C. 7:27-31.12(e)1i, in order to be more consistent with the language in the definition of “budget source,” the Department should strike the words “boiler or” from the phrase “a fossil fuel-fired boiler or indirect heat exchanger...” because 1) this language is not used in the definition of “budget source” and 2) a boiler is an indirect heat exchanger. {14}

RESPONSE: The Department has amended this provision for consistency with language in other provision of the rule. This change does not alter the meaning of the provision.

146. COMMENT: The Department received the following comments regarding an error at N.J.A.C. 7:27-31.12(e)1i:

The words “at least” should be added to this provisions to to read "...maximum rated heat input capacity of at least 250 mmBtu per hour...." This would provide consistency with the definitions of "Baseline Source" and "Budget Source." Failure to make this change would allow



large boilers and indirect heat exchange units (greater than 250 mmBtu per hour) to claim reductions below Reasonably Available Control Technology (RACT) as early reductions. {3}

There is a typographical error in proposed N.J.A.C. 7:27-31.12(e)1i. PSE&G believes that this provision should refer to units "...with a maximum rated heat input capacity of 250 MMBtu per hour or greater...", rather than simply units with a maximum rated heat capacity of 250 MMBtu per hour. {14}

RESPONSE: The Department has corrected this error upon adoption.

147. COMMENT: N.J.A.C. 7:27-31.12(e)1ii, reference should be to (c)5i and (c)5ii, and not (d)5i and (d)5ii. {1}

RESPONSE: The Department has corrected this error upon adoption.

148. COMMENT: PSE&G notes that N.J.A.C. 7:27-31.12(e)1i refers only to fossil fuel fired indirect heat exchangers with maximum rated heat input capacities of at least 250 MMBtu per hour, whereas N.J.A.C. 7:27-31.12(e)1ii and iii refer to these sources as well as other types of sources. This makes the comparison of baseline emission rates among N.J.A.C. 7:27-31.12(e)1i through iii somewhat awkward and confusing, because N.J.A.C. 7:27-31.12(e)1i is not applicable to all sources. {14}

RESPONSE: To determine the baseline emission rate for a fossil fuel fired indirect heat exchangers with maximum rated heat input capacities of at least 250 MMBtu per hour, then select the lowest value resulting from provisions (e)1i, ii, or iii. To determine the baseline emission rate for any other budget source, then select the lowest value resulting from provisions (e)1ii, or iii.

149. COMMENT: N.J.A.C. 7:27-31.12(e)(1)ii contains a description of how a source's "actual 1990 NO<sub>x</sub> baseline emission rate" is to be calculated, whereas N.J.A.C. 7:27-31.12(e)(1)i also refers to the term "actual 1990 NO<sub>x</sub> baseline emission rate" but does not describe the calculation method. {14}

RESPONSE: The same calculation applies for both. The Department has revised the provision at N.J.A.C. 7:27-31.12(e)1i accordingly.

150. COMMENT: The Department received the following comments regarding the order of proposed (g) and (h):

In N.J.A.C. 7:27-31.12(d), the definition of E<sub>p</sub> should reference subsection (h) and not subsection (g). The definition of P<sub>p</sub> should reference subsection (g) and not subsection (h). {1}

PSE&G believes that the order of N.J.A.C. 7:27-31.12(g) and (h) should be reversed, so that the terms E<sub>p</sub> and P<sub>p</sub> appear in the same order in which they occur in the equation in N.J.A.C. 7:27-31.12(d). This revision would make the sequence of N.J.A.C. 7:27-31.12(g) and

(h) consistent with that of N.J.A.C. 7:27-31.12(e) and (f), which refer to  $E_B$  and  $P_B$ , respectively. {14}

RESPONSE: The Department has switched the order of subsections (g) and (h) upon adoption. The references to these provisions in the equation at subsection (d) are now correct.

151. COMMENT: Proposed N.J.A.C. 7:27-31.12(n) and (o) outline provisions which allow the public to comment on and potentially contest a budget source's early reductions. This public comment opportunity comes after a budget source has sought approval from the Department for its early reductions and after the Department has granted a budget source preliminary approval for its claim. Our review of the OTC Model Rule and the proposed rules of four other OTC states—Massachusetts, Maryland, New Hampshire, and Pennsylvania—indicates that this public comment process is entirely unique to New Jersey. New Jersey is the only state that proposes to subject early reduction claims to the public comment process. The public comment provisions should be stricken from the proposed rule not only because of this inconsistency but also for the following reasons. First, the provision introduces a great deal of uncertainty into the early reduction approval process. While the proposed approval process outlines clear and reliable guidelines for early reduction claims, the public comment process effectively undermines the integrity of these guidelines by subjecting early reduction claims to a second approval process with unknown criteria. Budget sources in other states will not be exposed to this uncertainty but will be free to move ahead confidently toward approval of their early reductions. Second, the provision authorizes the Department to seek comments from other OTC states on early reduction claims by New Jersey budget sources. We fail to understand why this broad-based quest for comments is necessary when it appears that other states are not considering the public comment process relevant to early reduction claims. We also question the consequences of allowing other states to comment on New Jersey's early reduction claims when this opportunity is not reciprocated. PSE&G hopes, based on these reasons, that the Department will agree to remove the public comment process from the proposed rule. However, should the Department decide to retain this process, then proposed (n) and (o) should be revised to 1) indicate that the Department will consider only relevant comments and 2) keep the process closed to other OTC states which do not reciprocate. {14}

RESPONSE: The Department proposed these provisions that announce creation of early reductions in a notice published in the New Jersey Register in order to add an extra level of visibility of the Department's actions to what is otherwise planned for early reductions throughout the OTC. Although other states have not mentioned any public review of early reduction allowances in their rules or regulations, the creation of early reduction allowances will be brought forward at the Stationary and Area Source Committee Meetings of the Ozone Transport Commission. The mention of specific early reductions at these open meetings will effectively give the OTC States the opportunity to review the extent of the early reductions being approved in each state and also provide the opportunity for any attendee to express any concerns. The Department has amended N.J.A.C. 7:27-31.12(o) to clarify that only relevant comments would need to be considered.

152. COMMENT: Proposed N.J.A.C. 7:27-31.12(k) states that claims will be approved upon verification that the reductions are real, properly quantified, and surplus. But nothing is mentioned regarding the verification process. Will this be performed by a third party verifier, by the Department or by EPA? {14}

RESPONSE: The Department will review and verify the early reduction claims. The provision has been amended upon adoption to make this intention clear.

N.J.A.C. 7:27-31.13 NO<sub>x</sub> allowance tracking system (NATS)

153. COMMENT: EPA plans to provide for the establishment of “overdraft accounts” which will allow for the owner or operator of a facility which has more than one budget source to have a separate account to draw from for all the budget sources at the facility. New Jersey may want to consider adding such a provision in the final rule. {1}

RESPONSE: The Department has considered the use of “overdraft accounts” in this rulemaking and has decided that compliance must be demonstrated on the source level and not on the facility level. Therefore, the use of overdraft accounts will not be allowed in New Jersey unless the Department amends the rule in the future to provide for such use.

154. COMMENT: There is a typographical error in proposed N.J.A.C. 7:27-31.13(d)1. The reference to 31.13(f) should actually be to 31.13(e). {14}

RESPONSE: As mentioned in the Agency Initiated Changes, the Department has deleted the superfluous example which contains the typographical error.

155. COMMENT: There is some confusion in N.J.A.C. 7:27-31.13(f) through (j) regarding the Account Certificate of Representation form. This form is for purposes of assigning a representative for compliance accounts only. In N.J.A.C. 7:27-31.13(i)4, the language reads, “if the account is a general account, the Account Certificate of Representation form shall contain the following...”. However, if the account is a general account, a representative is assigned through the submission of the General Account Information form. This form both opens a general account and assigns a representative to this account. Compliance accounts on the other hand, are automatically created for each unit, and representatives are assigned through the submission of the Account Certificate of Representation Form. {1}

RESPONSE: The Department has amended these provisions and N.J.A.C. 7:27-31.13(d) to clarify that the Account Certificate of Representation form applies to compliance accounts that are automatically created and that the General Account Information Form applies to the establishment and representation of a general account.

156. COMMENT: N.J.A.C. 7:27-31.13(f)2 should be clarified to provide that disclosing the purposes for which the account is to be used is voluntary, rather than required. {1}

RESPONSE: In response to the previous comment, the Department has simplified this provision eliminating the reference to disclosing the purpose of the account. The Department agrees that any such disclosure is voluntary.

157. COMMENT: In N.J.A.C. 7:27-31.13(j), note that the Account Certificate of Representation Form does not require the street address at which the budget source is located. {1}

RESPONSE: The Department has deleted reference to the source location in this provision.

158. COMMENT: N.J.A.C. 7:27-31.13(h) outlines a schedule for the designation of Authorized Account Representative (AAR), but why is such schedule needed? Participants in the budget cannot file required reports or set up appropriate accounts without an AAR being designated. Since there are already time constraints spelled out in the budget process which will prompt such actions, why should there be a separate schedule for the designation? It just seems like one more detail that has to be taken care of, and one more thing to be in violation of if a deadline is missed. What importance does it have in itself? Also, AAR designations for new and opt-in sources are being required at the time of permit submittal and opt-in request submittal, respectively. Does it really make sense that these persons should be taking care of this detail before it is even known if a source will be built, or if a source will be allowed into the budget through an opt-in? It is recommended that this entire section be removed. If it is not, then at the very least, the deadline for new and opt-in sources should be set for sometime after approval of permits and opt-in plans. {8}

RESPONSE: The Department has simplified this provision upon adoption. First, the proposal indicated an Account Certificate of Representation form due date 30 days after the operative date of the rule a date as the due date for this form. However, the Authorized Account Representative (as established in the Account Certificate of Representation form) must submit monitoring plans to the Department as of the operative date of the rule. Therefore, the Department has amended the date by which the Account Certificate of Representation form must be submitted no later than the date by which monitoring plans is due (that is by the operative date of the rule). Secondly, for new sources that would be subject to the NO<sub>x</sub> Budget Program, an Account Certificate of Representation form would not need to be submitted until a NO<sub>x</sub> Budget Monitoring Plan is submitted. Third, an Account Certificate of Representation form would need to be submitted at the time the source is sought to be opted into the NO<sub>x</sub> Budget program.

159. COMMENT: Regarding proposed N.J.A.C. 7:27-7:27-31.13(i), if the 'self-certification' method identified in N.J.A.C. 7:27-31.13(i) for designating the Authorized Account Representative (AAR) is specifically established by EPA, which is to be the NATS administrator, then perhaps there is no option but to use it. But it seems odd that anyone can

send in a form and declare their status as an AAR, without any verification from individuals who are normally taken as legally representing source owners and operators. Such declarations, and changes to the designation, can be made without any notice to persons in charge overall. (The NATS administrator sends confirmation of designation and changes to the holder, but the person to whom the confirmation is sent as representing the holder is the AAR.) It may not be likely that persons would knowingly try to manipulate this system, but it does seem that there is a possibility for situations where there are honest mistakes and confusion about who is supposed to do what within an organization. It would seem more logical to require a “responsible official” of the holder, as defined in Subchapter 1 of the Department’s regulations, to designate the AAR and alternate AAR, and sign any changes in designation. {8}

RESPONSE: The Department will verify that the person(s) who sign the Account Certificate of Representation form for budget sources are duly authorized from the company before forwarding the form to the NATS Administrator.

160. COMMENT: There is a typographical error in proposed N.J.A.C. 7:27-31.13(j). Instead of referring to 31.13(j), the proposed rule incorrectly refers to 31.13(f) a second time. {1}{14}

RESPONSE: The Department has corrected this error upon adoption. No correction of any cross-references is needed.

#### N.J.A.C. 7:27-31.14 Emission monitoring

161. COMMENT: N.J.A.C. 7:27-31.14, The proposed new rules refer to the EPA “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program” dated January 28, 1997. Although this Guidance provides an elaborate framework of requirements for the monitoring of NO<sub>x</sub> emissions, there are a number of ambiguities in the Guidance, as well as a number of areas that could be further refined. It is recommended that the Department incorporate in the proposed rule a provision to grant the Department the authority to: issue clarifications and interpretations of the EPA Monitoring Guidance requirements; refine and adapt the Monitoring Guidance specifications to site specific situations; and refine and adapt the Monitoring Guidance to facilitate or simplify implementations so long as the purpose and effectiveness of a specification is not compromised or impaired. {6}

RESPONSE: Although the rule and the monitoring guidance provide an great level of detail regarding monitoring requirements, the Department recognizes that the requirements may not be completely clear for some particular situations. Such situations will be dealt with on a case-by-case basis and should be brought forward to the Bureau of Technical Services. Also, to the extent that such particular situations have been discussed at the implementation workshops, they may be addressed in the Questions and Answers document at the EPA Acid Rain website. Additionally, as such cases are brought forward and dealt with, the Department will work with EPA to have such situations included in the Questions and Answers Document.

162. COMMENT: The Department received the following comments regarding the date by which monitoring plans are required to be submitted:

At N.J.A.C. 7:27-31.14(b), the Department should allow at least 90 days after the operative date of this regulation for facilities to submit monitoring plans. {7}

The required date for submission of a Monitoring Plan should be consistent with the date for designation of an Authorized Account Representative “(30 days after the operative date of this Subchapter).” In fact, more time should be allowed in light of the information requested and the penalty for failure to provide such information.

The date for submission of the Monitoring Plan should be not less than 60 days after the operative date of the Subchapter. {18}

The requirement in N.J.A.C. 7:27-31.14(b) that a monitoring plan must be submitted by the operative date of the proposed Subchapter is unreasonably burdensome. A two-step process, similar to what is being used in Massachusetts, is highly recommended. A conceptual monitoring plan should be required forty-five days after the operative date of the proposed Subchapter, followed by approval by the Department within 60 days. After the Department approval of the conceptual monitoring plan has been received, a detailed monitoring plan should be required 45 days later. Numerous sources in New Jersey (and elsewhere in the OTC) will require CEMS upgrade involving software revisions or replacement. It is unlikely that software vendors will begin to offer NO<sub>x</sub> Budget software packages for New Jersey sources until all aspects of the NO<sub>x</sub> Budget software configurations are resolved. Consequently it may be some time before software packages are available. Thus, it will be difficult for sources to create the electronic portion of the Monitoring Plan (EDR 500 records) without the software packages being in place. Therefore, the deadline for submittal of the electronic portion of the Monitoring Plan should be delayed to July, 1998 for all sources, consistent with the deadline for Part 75 sources established in the EPA Monitoring Guidance. {6}

RESPONSE: The Department has not changed the date by which monitoring plans are due. The Department announced the due date when proposing these rules almost one year prior to the due date. This amount of time is more than adequate amount of time for affected companies to prepare for the timely submittal of monitoring plans.

163. COMMENT: As mentioned earlier under the comments on N.J.A.C. 7:27-31.4, New Jersey should clarify the incorporation by reference of the monitoring guidance documents by removing the language “... as are any subsequent revisions thereto” from N.J.A.C. 7:27-31.14(a). Also, New Jersey should provide the dates on which these documents were published (January 28, 1997 for the monitoring guidance and July 3, 1997 for the EDR and reporting instructions.) Lastly, while EPA’s Acid Rain Division will place guidance documents on their web page, written requests for these documents should go to New Jersey and not EPA.{1}

RESPONSE: The Department improved the provisions which reference the monitoring guidance and other guidance documents upon adoption. See response to comment #37 and N.J.A.C. 7:27-31.21. The Department has deleted the provisions proposed at subsections (h) through (m) because the referenced monitoring guidance provides these details and the provisions in the rule would be superfluous.

164. COMMENT: The Department received the following comments regarding discrepancies between the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program" and some of the detailed provisions proposed at N.J.A.C. 7:27-31.14, especially at N.J.A.C. 7:27-31.14(k):

The OTC document entitled "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program" ("OTC Guidance Document") provides various monitoring options for budget sources. In fact, throughout N.J.A.C. 7:27-31.14, the proposed rule cites this document repeatedly as the document of record concerning NO<sub>x</sub> emissions monitoring. PSE&G notes, however, that the proposed rule restricts the use of certain monitoring options that are provided in the OTC Guidance Document. For reasons set forth in the following comments, the proposed rule should be revised to provide the full degree of flexibility allowed in the OTC Guidance Document.

The main differences between the OTC Guidance Document and the proposed rule are shown in *italics* in the "Heat Input" portion of the table. These differences are:

- 1) the proposed non-oil/gas restriction on the eligibility of non-Part 75 budget sources to use an alternative heat input methodology;
- 2) the proposed 25-MW restriction on the eligibility of non-Part 75 budget sources to use long-term fuel flow rate determinations;
- 3) the proposed rule's omission of the unit-specific maximum heat input option.

We are aware that some discrepancies exist between the OTC Guidance Document and the monitoring provisions of the OTC Model Rule. Where these discrepancies occur, however, the OTC Guidance Document should prevail over the Model Rule for three basic reasons. First, the OTC Guidance Document is where the OTC worked out the highly particular issues and technical details associated with emissions monitoring under the NO<sub>x</sub> Budget Program. Second, the OTC Guidance Document which is dated January 28, 1997, is more recent than the OTC Model Rule, the most recent draft of which is dated May 1, 1996. Finally, proposed N.J.A.C. 7:27-31.14 cites the authority of the OTC Guidance Document. {14}

At proposed N.J.A.C. 7:27-31.14(k), this section is somewhat confusing. Earlier under N.J.A.C. 7:27-31.14 it prescribes the use of the "Guidance for Implementation of Emission Monitoring Requirements of the NO<sub>x</sub> Budget Program." Under those requirements, long term, up to monthly, fuel measurement is allowed and apportioned to satisfy hourly emissions reporting requirements. A budget source of 25 MW or greater that combusts only oil or natural gas could be required to measure fuel use on an hourly basis. Since this is not required under the guidance document, it should not be required under these regulations. The ozone season NO<sub>x</sub> allocation is a seasonal program and requiring hourly measurements unnecessarily inflates costs without providing information any more valuable for demonstrating compliance than the long term measurements. The cost of installing fuel measurement systems to record hourly measurements on units which have historically had no monitoring requirements; have had relatively low emissions levels; do not have a short term emission limit established; and which operate as peaking units, simply has no commensurate benefit. This same situation applies to 7:27-31.14(k)3. Therefore, it is our recommendation that only the requirements of the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program" be required. {3}

RESPONSE: The Department agrees that these discrepancies should not exist and that the Department did not intend to create these discrepancies when it proposed the detailed

monitoring requirements modeled after the model rule language and modeled after the content of the monitoring guidance. Therefore, the Department has simplified the monitoring requirements in the rule in order to address these inconsistencies and any others that may have been overlooked. Although the simplified requirements are not as detailed as those proposed, they are substantially equivalent.

165. COMMENT: At proposed N.J.A.C. 7:27-31.14(l) says the alternative methods for determining heat input in (k) above are subject to both initial and periodic relative accuracy and quality assurance testing... This should only refer to N.J.A.C. 7:27-31.14(k)4. {1}

RESPONSE: The Department agrees that alternative methods for determining heat input are subject to initial and periodic relative accuracy testing. However, the Department has simplified this section in order to prevent any discrepancies between the rule and the referenced monitoring guidance. In doing so, the provision at subsection (l) no longer exists.

166. COMMENT: The Department received the following comments regarding the approval of “alternative” emissions measurement and monitoring systems that are not specified as options under the final monitoring guidance:

The MADEP urges New Jersey to adhere to the final version (January 28, 1997) of OTC’s Monitoring Guidance and not allow variances from the procedures specified therein. In Massachusetts, MADEP received repeated requests to consider variances from the guidance in cases where the guidance seemed to impose an excessive burden on certain sources. MADEP rejected these requests, however, since we feel that the integrity of the regional program requires a strict adherence to the final guidance. MADEP urges New Jersey to be equally firm in this regard. {11}

N.J.A.C. 7:27-31.14 contains the monitoring requirements for budget sources. This section is also incorporating by reference the monitoring guidance documents developed for the NO<sub>x</sub> Budget program, specifically the “*Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program*” document. N.J.A.C. 7:27-31.14 and the guidance document contain provisions for sources to petition the State for alternative monitoring decisions. In most cases, the procedures and criteria presented for alternative monitoring decisions are detailed enough to avoid a director’s discretion issue. However, there are some cases where detailed procedures and criteria are either not descriptive enough or are not included. Specifically, EPA believes this occurs in N.J.A.C. 7:27-31.14(k) of the proposed rule and in the monitoring guidance document pages 12, 17 and 27 in the sections on long-term fuel flow rate determinations, requirements for heat input methodology petitions and alternatives for establishing span and range. In these cases where director’s discretion exists, New Jersey should clarify how these alternative monitoring decisions will be reflected as part of the SIP. EPA believes the State can either process these decisions as source-specific SIP revisions or as a significant modification under Part 70, in accordance to EPA’s White Paper 2, Attachment A and B on SIP flexibility. {1}

RESPONSE: The Department agrees with principle of requiring monitoring in accordance with the final Monitoring Guidance in order to provide a consistent and accurate reporting of



emissions throughout the program. The Department recognizes there may be cases where a particular deviation of the final monitoring guidance would provide relief to a source without eroding the accuracy of emissions information submitted to this program. Due to this possibility, the Department will consider certain alternatives to the final monitoring guidance provided that the relative accuracies of such alternatives and the certification of any alternative monitoring systems are of equal or more stringent level to the methods and systems that would otherwise be required. Additionally, the Department would assure that opportunity for review by EPA and other OTC States would occur before the Department would approve any such alternatives. Finally, the Department would submit any such approved alternatives to EPA under applicable procedural requirements. This intention is expressed at N.J.A.C. 7:27-31.14(h), which is added upon adoption.

167. COMMENT: Upon further review, the monitoring guidance document suggests (in fact requires) that non-part 75 sources install CEMS units. There are options for some users to apply for alternative methods, but it is not at all clear whether these options would apply to MPLP. During workgroup discussions, there seemed to be a general intent which the parties were moving towards that there would be no requirement for installation of CEMS units. Rather, those sources currently not required to use CEMS would not be required to do so under the NO<sub>x</sub> budget rule. This inconsistency is very confusing to us. I strongly suggest the language in the NO<sub>x</sub> Budget Rule be clarified to confirm that non-part 75 sources which currently are not required to use CEMS for NO<sub>x</sub> monitoring are not required to install CEMS for the NO<sub>x</sub> Budget Rule. Additional wording stating that these sources could continue to use their existing method of NO<sub>x</sub> monitoring would provide further clarification. This is especially true when realizing that those of use who currently are not required to use CEMS have already had lengthy discussions with and submittal to the Department as part of the permitting process and would really prefer not to have to go through it all over again. {13}

RESPONSE: The rule and the guidance document require the use of CEMs based monitoring systems for non-Part 75 sources that 1) have a maximum heat input capacity of at least 250 MMBtu and are not peaking units, 2) combust or a permitted to combust solid fuel, or 3) are otherwise required to install and use NO<sub>x</sub> Continuous Emission Monitoring (CEM) Systems. This has always been the intent of the rule and is consistently applied throughout the OTC. During workgroup meetings, there was an indication that this rule would not require a widespread installation of CEM system, due to the presence of rules and regulations that have already required the installation of such monitoring systems on many of the sources subject to the NO<sub>x</sub> Budget Program (such as 40 C.F.R. Part 60 and N.J.A.C. 7:27-19). As expressed in the workgroup meetings, the Department expected that most of the sources that would need to report CEM data, have already installed CEM systems.

#### N.J.A.C. 7:27-31.15 Recordkeeping

168. COMMENT: The following statement should be added to N.J.A.C. 7:27-31.15: "The records shall include, but not be limited to, the type and the amount of fuel combusted daily."{1}

RESPONSE: The type and amount of fuel combusted by a budget source are required data which are already included in this provisions at N.J.A.C. 7:27-31.15.

N.J.A.C. 7:27-31.16 Reporting

169. COMMENT: The Department received the following comments regarding the due date for the submittal of 1996 and 1997 data from budget sources for the purposes of initializing data to be used for allowance allocation:

At N.J.A.C. 7:27-31.16(a)1, the time for submission of 1996 and 1997 data should be extended from 60 days after the operative date to 90 days. This will require great effort, and 60 days is simply too short a time frame, especially since this will be the first time these data are gathered and submitted. {3}

Proposed N.J.A.C. 7:27-31.16(a)1 calls for the submission of 1996 and 1997 control period data within 60 days of the operative date of the final NO<sub>x</sub> Budget Program rule. Assuming that the Department achieves its target operative date of February 8, 1998, the deadline for submitting 1996 and 1997 data would be April 9, 1998. As proposed in N.J.A.C. 7:27-31.16(a)2, 1998 control period emissions data would be due by October 30, 1998. PSE&G questions the use of two separate submission dates and the Department's call for 1996 and 1997 control period data almost seven months earlier than 1998 data. Aside from the opportunity to get an early start on data input to the Department's database, PSE&G believes that there is little benefit to either 1) the scheduling of two submission dates or 2) the scheduling of the first submission date as early as 60 days following the operative date of the final rule. First, emissions data from all three control periods are required before the Department can begin to set aside allowances for reserves and compliance accounts from the 1999 base emissions budget. Control period data for 1996 and 1997 cannot be used for allocation purposes until similar data for 1998 have also been collected. Second, the Department will be required to establish a format for control period data. Budget sources will need this format well in advance of the proposed April 9th submission date. Our concern is that budget sources might be required to resubmit their 1996 and 1997 data at a later date if the format is found to be in need of revision. Third, under separate reporting regulations, N.J.A.C. 7:27-21 requires affected sources to submit emissions statements by May 15 of each year. These statements include actual NO<sub>x</sub> emissions data for the previous calendar year. As currently proposed, N.J.A.C. 7:27-31.14(a)1 will require budget sources to submit these same data more than a month earlier. On the basis of these reasons, we propose that the Department consolidate the submission of control period emissions data for the three years and use the submission deadline of October 30, 1998 for all three control periods. This would provide the Department ample time to develop a suitable data collection format. It would also give budget sources sufficient time to test the workability of the format and work with the Department to correct any flaws the format may have. {14}

RESPONSE: The Department agrees that the data for 1996 through 1998 should be submitted together. The data submitted under N.J.A.C. 7:27-21 "Emission Statements" is unsuitable for this purpose. The Department has merged the provisions at N.J.A.C. 7:27-31.16(a)1 and 2. As adopted, data for the 1996, 1997 and 1998 ozone seasons would be

submitted together by October 30, 1998. This date is 75 days after the operative date of the rule.

170. COMMENT: Proposed N.J.A.C. 7:27-31.16(a)3iv calls for heat input and NO<sub>x</sub> emissions data for each type of fuel burned by a budget source during the control period. Collecting these fuel-specific figures accurately will be difficult for co-fired units which are required to simultaneously burn fuels such as coal and natural gas during the ozone season. We would like the Department to reconsider this fuel-specific requirement for co-fired budget sources and perhaps include an alternate provision which gives these sources greater flexibility in reporting heat input and emissions data for periods of co-fired operation. {14}

RESPONSE: The Department agrees that the heat input, NO<sub>x</sub> emissions and lowest allowable emission rate for a source that simultaneously combusts of more than one type of fuel needs to be addressed. Co-fired scenarios should be reported as a single type of fuel burned as appropriately described.

171. COMMENT: Proposed N.J.A.C. 7:27-31.16(a)3vi authorizes the Department to request additional information for allocation purposes. In the interest of streamlining the data collection process, we would appreciate the opportunity to work with the Department to ensure that any information requested is necessary and appropriate to the proper allocation of allowances in accordance with N.J.A.C. 7:27-31.7. {14}

RESPONSE: The Department will provide an opportunity for input into the data collection forms and procedures by affected companies.

172. COMMENT: The data submission requirements under this section appear to be excessive and unnecessary. Rather than hourly data, it appears that these data need only be submitted as ozone season totals to complete the allocation formulas. Requirements for the submission of unnecessary data will only result in added costs for preparation and submission as well as processing by the Department. {3}

RESPONSE: The data collected under this program will predominately be derived from continuous emission monitoring systems. The Electronic Data Reports and the NO<sub>x</sub> Emission Tracking System are designed to accept hourly data. The requirement to submit hourly data is appropriate and provides a superior level of detail and accountability of the emissions data.

173. COMMENT: Proposed N.J.A.C. 7:27-31.16(c)2 should be revised by removing the language "... as are any subsequent revisions thereto." Also, the language discussing who prepared the documents, when they were prepared and how copies may be obtained, could be deleted since this will be clearly defined in N.J.A.C. 7:27-31.14. Otherwise, written requests for documents should go to New Jersey and not EPA. {1}

RESPONSE: The Department has amended this provision by moving and improving the language incorporating the reference to N.J.A.C. 7:27-31.21. Please see response to comment #37 for further detail.

174. COMMENT: As per N.J.A.C. 7:27-31.16(c), the requirement that a NO<sub>x</sub> budget unit using NO<sub>x</sub> CEMS or stack flow monitoring, or heat input based on CEMS must submit an emissions report to EPA's Acid Rain Division each calendar quarter is overly burdensome. The NESCAUM/MARAMA NO<sub>x</sub> Budget Model Rule dated May 1, 1996 states "Budget sources not subject to 40 CFR, Part 75 shall submit said quarterly reports within 30 days of the end of each of the second and third calendar quarters." Most units in New Jersey using CEMS as per 40 CFR 60 currently only need to report data if their permit requires this. Often permits only require the reporting of excess emissions. Providing data in the proper EDR format, substituting missing data, applying a Bias Adjustment Factor, maintaining dual range analyzers, reporting partial hours in quarter-hour, etc. are additional burdens that are not necessary. Based on the above and since non-CEMS units only need to report data for the ozone season, CEMS units should only report for the ozone season. This would be consistent with the NESCAUM/MARAMA NO<sub>x</sub> Budget Model Rule. {6}

Proposed N.J.A.C. 7:27-31.16(c) requires budget sources equipped with CEMs to report emissions data in accordance with the EDR requirements of the Acid Rain Program and the NO<sub>x</sub> Budget Program. The Acid Rain Program (40 CFR Part 75) calls for EDR reports for all four quarters of the calendar year. The NO<sub>x</sub> Budget Program is concerned only with the May 1-September 30 control period, which is covered by the second and third quarters. As proposed, however, N.J.A.C. 7:27-31.16(c) currently requires all CEM sources--Part 75 and non-Part 75--to submit EDR reports for all four quarters. Non-CEM budget sources are required to submit EDR reports only for those quarters which cover the control period: the second and third quarters. CEM sources which are not subject to 40 CFR Part 75 should be classified with non-CEM sources in this particular case and should be required to submit EDR reports only for those quarters that are relevant to the NO<sub>x</sub> Budget Program (i.e. the second and third quarters). This would significantly reduce the administrative burden on all sources which are not subject to the Acid Rain Program without compromising the control period data requirements of the NO<sub>x</sub> Budget Program. {14}

RESPONSE: The requirement that data collected from CEMs based systems be submitted through an EDR to the NETS every quarter is consistently required throughout the states participating in the OTC NO<sub>x</sub> Budget Program. The Department has retained this requirement and is consistent with the guidance developed after the model rule was completed. The consistent reporting of NO<sub>x</sub> emissions throughout the entire region is absolutely essential to the equitable implementation of the program. Additionally, the additional burdens to operate and report emissions from units which have CEMs installed in accordance with the NO<sub>x</sub> Budget Program would be insignificant and may even be less burdensome than operating the CEMS in accordance with another program for part of the year and then operating the CEMS in accordance with the NO<sub>x</sub> Budget Program for another part of the year.

175. COMMENT: Pursuant to proposed N.J.A.C. 7:27-31.16(c), EDR reports must be submitted starting in the third quarter of 1998. Proposed N.J.A.C. 7:27-31.14(c) requires the owner or operator of a budget source to install and commence operation of emission monitoring systems by no later than July 1, 1998, which is the start of the third quarter of 1998. Proposed N.J.A.C. 7:27-31.14(c) also requires such monitoring systems to be certified by no later than April 30, 1999.

This schedule creates a conflict because the 900 level records in EDR2.0 require certification of the data submitted in the EDR. However, certification is not required until April 30, 1999. Therefore, there is a possibility that companies will be submitting some uncertified data for third quarter 1998, first quarter 1999, and part of the second quarter of 1999.

PSE&G suggests that companies should have the flexibility to submit EDR reports without the 900 level certification records, at least for units that are not required to submit Acid Rain CEM reports. { 14 }

RESPONSE: The Department recognizes that it is requiring the submittal of an EDR prior to when the monitoring systems are required to be certified. This requirement serves to allow a “practice” EDR report to be submitted before the EDRs pertaining to emissions of the 1999 control period are submitted. This “practice” EDR will serve to identify and correct any unforeseen problems before they could potentially affect compliance with the requirement to balance NO<sub>x</sub> emissions with allowances. The best possible practice EDR would contain data from certified monitoring system. However, the Department recognizes that this may not be possible and data submitted from monitors that have been installed but have not yet been certified would also serve the purposes of a “practice” EDR. In such cases, some of the 600 level records regarding certification test data would acceptably be missing. The 900 level records which contain the certification statement and Authorized Account Representative Signature information would need to be included regardless of whether the monitoring systems have undergone certification testing.

The Department also recognizes that the proposed requirement to begin submitting EDRs for emissions will be too soon for many sources. Monitoring plans are due as of the operative date of this rule, August 16, 1998. Pursuant to N.J.A.C. 7:27-31.14(c), monitoring systems will be required to be installed and operated by 60 days after the Department approves the monitoring plan or by a date specified in the approval of the monitoring plan. This would be during the fourth quarter of 1998 at the earliest. Therefore, the Department has amended the subsection (c) upon adoption. The first EDR report is due 30 days after the calendar quarter in which the monitoring systems are required to be installed and operated. For example, if the Department approves the monitoring plan for a particular budget source on September 15, 1998, then the monitoring systems must be installed and operated by November 14, 1998. Since November 14 is in the fourth quarter of 1998, the first EDR would be required to be submitted by January 30, 1999. The data first reported may be a partial quarter’s worth of data, provided the quarter is prior to the second quarter of 1999.

176. COMMENT: The Department received the following comments regarding proposed N.J.A.C. 7:27-31.16(d) which would require additional data to be reported in the EDR:

New Jersey should realize the EDR does not cover the collection of additional data and the State should work with EPA Acid Rain Division to discuss how this may possibly be done. {1}

What methods will be used to apportion to each unit the gross and net electric output and useful heat output from a facility consisting of multiple combined cycle units? {7}

TOSCO recommends changing the requirement so that reporting any one of the listed items (instead of all of the items) would suffice. {22}

Additional reporting information is requested beyond that required by EPA through their Electronic Data Reporting, EDR, format, USGen strongly objects to the statement "...budget sources shall submit the following information... regardless as to whether the Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program specifies the reporting of the information." As participants in the NO<sub>x</sub> Budget Program of several States, USGen will be required to prepare and submit these very detailed reports throughout the Region. It is essential that the formats be standardized as much as possible. That was EPA's intention in developing the "Guidance" and the EDR format. The Department should work with EPA, as the agency has suggested in previous workshops on EDR, to incorporate any additional data requirements in the EDR to minimize the reporting burden on the sources. {18}

This requirement should be eliminated for the following reasons. First, as previously discussed, PSE&G believes that the Department should reserve or set aside adoption of the proposed 2003 allocation method for the time being, together with the net output requirements called for by this allocation method. Second, if the Department decides to retain the 2003 allocation method, then we advocate the use of gross, rather than net, figures for electric and useful heat output. The proposed rule should strive to be consistent with the Acid Rain Program EDR provisions and the OTC Guidance Document, which call for sources to report hourly gross electric output. Additionally, sources typically track gross electric output for reporting purposes, and track their net electric output only for internal purposes. The manner in which this data is collected can vary widely among different generating sources, resulting in potential discrepancies in data collection and formatting. It would impose a substantial administrative burden and a possibly onerous cost burden on generating sources to modify their net electric output tracking to a consistent standard format. This burden seems unnecessary in view of the fact that tracking and reporting processes are already in place for hourly gross electric output. Third, if the Department chooses to retain the net output requirement, then this information should not be included in the EDR report, but should be reported separately under N.J.A.C. 7:27-31.16(a). As currently proposed, N.J.A.C. 7:27-31.16(d) calls for sources to report information which is relevant only to New Jersey's proposed allocation method in their EDR reports. The EDR2.0 report format currently does not contain any record type for net electric output data. This will require the Department to take an existing EPA report format and modify it to New Jersey specifications. It will also require budget sources throughout the State to perform custom modifications to their EDR software. {14}

RESPONSE: The Department is retaining the requirement to report total heat input for the control period, if hourly data are not already being reported in the EDR. This piece of data is necessary in order for the Department to allocate allowances and should be reported as an 800 level record. The other pieces of data proposed would support the 2003 allowance allocation and would only need to be reported for the years 2000 and beyond. The Department will work with EPA regarding the collection of output data and will specify the proper data and reporting

mechanism in the future. Therefore, the Department has deleted the requirement to report hourly output data within the EDR submittals until the proper mechanism for the reporting of such data is better established and subsequently amended into the rule.

N.J.A.C. 7:25-31.17 End-of-season reconciliation

177. COMMENT: At N.J.A.C. 7:27-31.17(d), TOSCO recommends adding the following sentence:

This condition does not apply to exchange of allowances between sources located on the same site and operated by a single owner.

A paper flow to document the exchange of allowances between sources located on the same site and operated by a single owner should not be a regulatory requirement. The system of transactions is designed to create a commodity which can be bought or sold. An onsite balance of allowances between sources may not involve either a current exchange or a change in ownership of the allowance. These exchanges should only be documented in the year-end reconciliation. {22}

RESPONSE: As mentioned in response to comment #131, the transfer of allowances between any two accounts needs to be requested through the valid submittal of the proper forms, regardless as to whether the two accounts belong to the same entity.

178. COMMENT: Please provide clarification at proposed N.J.A.C. 7:27-31.17(e) and (f). Subsection (e) allows that the AAR may have allowances deducted between November 1 and December 31 for compliance. However this does not imply that the action is mandatory. Subsection (f) goes further to explain that if the AAR does not take the action that the NATS Administrator shall make the deductions. Since there is also no penalty for failing to transfer allowances (unless there are insufficient allowances in the account) is it safe to assume that this is strictly a voluntary action on the part of the AAR? Are there other implications to paragraph (e) that are not readily apparent? {18}

RESPONSE: These two provisions state that the AAR has an opportunity to voluntarily assign a different order for which allowances will be deducted during the reconciliation process than the default order that the NATS administrator will take. The default order that the NATS administrator will deduct allowances during the reconciliation process is as follows: First, current year allowances (allowances having a serial number of the control period for which the emissions occurred) in the order in which they were deposited into the account; second, banked allowances in the order that they were deposited into the account. If the source wishes allowances to be deducted in a different order, (e.g. all banked allowances first, and then current year allowances), then through the provision at N.J.A.C. 7:27-31.17(e), the AAR would need to request the NATS administrator to used such order. This provision does contradict the mandatory compliance with this program through the reconciliation of NO<sub>x</sub> emissions with the proper number of allowances.

179. COMMENT: The following comments were made in respect to the two alternatives proposed at N.J.A.C. 7:27-31.17(g)3 which deducts allowances from opt-in sources that reduce utilization below the level used to allocate allowances:

US Generating strongly supports an aggressive transfer to an output based approach. This is the most effective method for establishing a “level playing field” for evaluating the emission efficiency of disparate energy sources. {18}

The second alternative using Energy Output should be used to adjust the allocation to opt in sources {7}

RESPONSE: The Department has selected the first alternative which uses heat input as the measure by which allowances are deducted from opt-in sources in the cases where utilization is curtailed. As mentioned by EPA in comment #176, the NO<sub>x</sub> Emissions Tracking System (NETS) will not track output and will only track the fuel use (that is heat input) from budget sources, which include opt-in sources. Therefore, the automatic procedure being established in both the NATS and NETS during the reconciliation process will not be able to implement the second option. If, in the future, NETS addresses energy output and the monitoring guidance establishes standards for the measurement of output to be reported to the NETS, then the Department will consider revising this provision to base the allowance deduction for opt-in sources on an output basis.

180. COMMENT: The following comments identified an error in the second alternative proposed at N.J.A.C. 7:27-31.17(g)3:

The equation contained in this alternative uses two variables for this output-based calculation: “O” and “O<sub>B</sub>”. However, the descriptions of the terms O and O<sub>B</sub> incorrectly refer to HI and HI<sub>B</sub>. If the Department selects Alternative 2, the references to HI and HI<sub>B</sub> should be changed to O and O<sub>B</sub>, respectively. {14}

The terms defined should be “O” and “O<sub>B</sub>” and not “HI” and “HI<sub>B</sub>”. {1}

The variables in the formula do not match the descriptors. {3}

RESPONSE: The alternative, which contains incorrect references in the equation, is not being selected upon adoption and is being deleted.

181. COMMENT: The Department received the following comments regarding proposed N.J.A.C. 7:27-31.17(h):

PSE&G takes exception to the provision proposed in N.J.A.C. 7:27-31.17(h) which allows the NATS Administrator to use allowances at large from the State’s base emissions budget to correct allocation errors in specific NATS accounts. As proposed, these adjustments unfairly penalize all New Jersey compliance accounts, rather than the specific account responsible for the error. In addition, these adjustments also penalize New Jersey budget sources for any allocation errors made by the Department. PSE&G feels that the penalty for an allocation error should be limited to the account in which the error was discovered. If the error is the responsibility of the Department, the proposed rule should include a provision which protects New Jersey budget sources from any corresponding corrections to the base emissions



budget. PSE&G also opposes the proposed provision at N.J.A.C. 7:27-31.7(b)5i(4) that references N.J.A.C. 7:27-31.17(h) {14}

PSE&G objects to the provision in N.J.A.C. 7:27-31.17(h) which allows the NATS Administrator to draw allowances from the base emissions budget to correct allocation errors, thereby spreading the penalty for allocation errors across all budget sources rather than restricting it to the specific account in which the error was originally made. PSE&G strongly urges the Department to revise this provision to limit such penalties specifically to the responsible accounts. {14}

In N.J.A.C. 7:27-31.17(h), the Department prescribes how corrections which might become necessary with regard to allowance allocations will be made over time. There is not, however, any data verification process implemented by this rule which would bring errors to light in a systematic way. There is certification of numbers going into the system, but not a required overview of the output. Some sort of verification process should be implemented, where source owners are advised of how their submitted data shows up in the numerous calculations and how allocations are derived. Since each source allocation is actually dependent on the allocation made to other sources, it would be advisable for the Department to publish an annual allocation spreadsheet containing the inputs and derived factors and allocation results for all sources in the program. While it would not be expected that each source owner would examine each and every number for every source, an overall picture will highlight obvious problems, provide a 'sanity check' for the system (for enforcement officials as well), and also provide good information for anyone interested in seeing patterns of operation and trading potentials. {8}

**RESPONSE:** The Department agrees that this provision needs clarification. This response provides such clarification. The Department will use data collected in the quarterly Electronic Data Reports (EDRs) as part of the input for the allocation system specified in section 7. After receipt of the EDRs, the EPA will perform a quality assurance process on the data which includes verification that all factors involved in the calculation of actual emissions were properly accounted (e.g. the bias adjustment factors are correct, missing data substitution procedures were followed correctly, etc). Even though EPA cannot guarantee that all of the data would be quality assured in time for the distribution of the reserves, it has expressed the likelihood that most data would be and that only a few problem cases would interfere with the ability to quickly quality assure all data. Additionally, the EPA recognizes that both New Jersey and Massachusetts allocate allowances after the control period based on operation of budget sources during the control period. Recognizing these allocation system, the EPA will be concentrating on quality assuring data from such states as quickly as possible and placing a higher priority on such data than on data from states that do not reallocate allowances after the control period. In any case, the data submitted through the EDR process is certified by the Authorized Account Representative as true, accurate and complete. With respect to distributing the New Source Reserve and the Growth Reserve before November 30 of each year, the Department will not readjust allocation of allowances if the quality assurance process shows that the source in question had more emissions than what was originally reported and the amount of allowances to be deducted from the compliance account during the reconciliation process will be based on the corrected data. Therefore, each company is responsible for any errors they submit in the EDRs and other recipients of allowances under the allocation system will not be affected by any adjustments. On the other hand, to prevent any gaming of the

system, the Department will deduct allowances from a sources compliance account in the case where the quality assurance process reveals that the source had less emissions than originally reported and therefore received more allowances than it otherwise would have during the distribution of the reserves. The Department is also retaining the ability to make adjustments in order to correct the possibility that the Department had made an error in allocation. The adjustment in this section would assure that NO<sub>x</sub> Budget sources would not be burdened by any mistakes made by the Department and the allocation system would properly compensate for the Department's mistake. Given the Department's plan to automate the transfer of data from the NETS and have in place a system to automatically calculate the allocations, the Department is confident that this provision to compensate for any allocation inequities due to mistakes would rarely if ever be used.

N.J.A.C. 7:27-31.18 Compliance certification

182. COMMENT: Proposed N.J.A.C. 7:27-31.18(c)5 calls for a statement verifying that all emissions from the budget source were accounted for. The authority of the proposed rule is limited to NO<sub>x</sub> emissions. We propose that "all emissions" be revised to "all NO<sub>x</sub> emissions". {14}

RESPONSE: The Department agrees and has amended the provision as suggested.

183. COMMENT: Proposed N.J.A.C. 7:27-31.18(c)6 calls for a statement indicating whether there were any changes in the method of operation of a budget source. However, the proposed rule fails to define what is meant by a "change in the method of operation" of a budget source, and we see no purpose in calling for this statement. Therefore, we request that the Department delete this provision. {14}

RESPONSE: The Department agrees that this information is not needed since the Department would be notified of such changes through monitoring plan changes, the Electronic Data Report, and/or any applicable permit modifications. The Department has therefore deleted N.J.A.C. 7:27-31.18(c)6 upon adoption.

N.J.A.C. 7:27-31.19 Excess emissions deduction

184. COMMENT: In N.J.A.C. 7:27-31.19(a), reference to the reconciliation process should be N.J.A.C. 7:27-31.17 and not 31.16. {1}

RESPONSE: The Department has corrected the citation error upon adoption

185. COMMENT: There is a typographical error in N.J.A.C. 7:27-31.19(a). The reference to N.J.A.C. 7:27-31.16 should actually be to N.J.A.C. 7:27-31.17, which is where the end-of-season reconciliation provisions are contained. {14}

RESPONSE: The Department has corrected the citation error upon adoption

186. COMMENT: It is not clear from proposed N.J.A.C. 7:27-31.19(a) whether the deduction of three allowances for each ton of NO<sub>x</sub> emitted for which no allowances were held constitutes the total allowance deduction, or if this deduction is in addition to the original allowance deficit. For example, if a source has a 10 ton allowance deficit at the allowance transfer deadline, does the NATS Administrator 1) deduct a total of 30 (10 x 3) allowances from the source's compliance account, or 2) deduct a total of 40 allowances [10 + (10 x 3)]? PSE&G believes that the first case is correct. Therefore, we suggest that N.J.A.C. 7:27-31.19(a) be revised to read "...the NATS Administrator shall automatically deduct a total of three allowances for each ton of NO<sub>x</sub> emitted...". {14}

RESPONSE: The first case in the example in the comment is correct. No change to the rule language is necessary.

#### N.J.A.C. 7:27-31.20 Program audit

187. COMMENT: The first audit of the NO<sub>x</sub> Budget Program is scheduled for 2002. Proposed 31.20(a) indicates that one of the purposes of the program audit is to "...determine the extent to which use of banked allowances has, or has not, contributed to emissions in excess of the budget...". PSE&G suggests that an additional purpose of an audit should be to improve the implementation and efficiency of the program. Also, PSE&G questions how the Department will fund this audit. Will it become part of the Department's Workload Analysis? In addition, PSE&G believes that the Department should add language to the rule indicating that, at a later date, it will revisit the rule and consider revising the rule to make it more consistent with any regional NO<sub>x</sub> reduction strategies developed by EPA or others. {14}

RESPONSE: The commenter's suggestion to include implementation efficiency improvements to the purpose of the program audit is worthy of consideration. How the program audit will be funded will be addressed at a later date. The Department is able to revisit the rule through its normal rulemaking process and does not need to mention this explicitly in the rule.

#### N.J.A.C. 7:27A-3.10 Civil and administrative penalties

188. COMMENT: The Department received several comments regarding the first line of the proposed penalty schedule:

PSE&G objects to the extraordinarily harsh nature of the "Hold Allowance" penalty at the first entry in the table at N.J.A.C. 7:27A-3.10(m)31. The footnote to this penalty stipulates that each ton of excess emissions is a separate violation and each of the 153 days in the control period constitutes a violation. As an example to illustrate the this penalty, consider a budget source that finds its account short 10 tons of allowances at the allowance transfer deadline. Ten

tons for each day of the 153-day control period multiplies to a total of 1,530 violations. Using the proposed penalty schedule, the fine for a 10 ton allowance shortage comes to \$45,826,000 (First Violation at \$2,000, Second Violation at \$4,000, Third Violation at \$10,000, Remaining 1,527 Violations at \$30,000 per violation).

PSE&G feels that this penalty schedule is punitive in the extreme. It is all the more offensive given the conditions inherent in the proposed rule that could lead a budget source to be in violation.

First, the uncertainties in the proposed allocation methods deprive budget sources of any clear knowledge of their compliance positions until the very last month of the year, when the Department actually determines and distributes allowances. A budget source with every intention of complying may suddenly discover that it has an allowance shortfall due to reasons beyond its knowledge or control. This is a strong likelihood in a year which sees a high number of claims against the Incentive or New Source Reserves. Once it discovers this shortfall, the proposed rule gives a budget source two weeks in which to find and purchase the allowances it needs to reconcile this shortfall. These two weeks fall at the end of the year, when the risk that no allowances may be available is at its highest. A budget source may therefore incur a penalty in the millions of dollars for a violation it could not see coming and could do nothing to prevent.

Second, as currently proposed, the penalty schedule will disproportionately influence the cost of an allowance. For example, if Company A holding excess allowances knows that Company B faces a potential penalty of nearly \$46 million for a 10 allowance shortfall, Company A could vastly inflate the price of its allowances for sale to Company B.

Although PSE&G is well aware of the importance of complying with the NO<sub>x</sub> Budget Rule, we find the proposed penalty schedule extremely unreasonable, punitive, arbitrary, and blind to contingencies inherent in the proposed rule which could subject a budget source to exorbitant fines for reasons beyond the control of the source. We strongly urge the Department to make the penalty schedule much more reasonable, and bring it in line with the penalty schedules in other states' rules, as well the existing penalty schedule for continuous monitoring systems outlined in N.J.A.C. 7:27A-3.10(n). {14}

At N.J.A.C. 7:27-3.10(m)31, please clarify this confusing penalty arrangement. Our understanding is that, if a source exceeds its allowance by one ton at the end of the allowance trading deadline, then the penalty will be \$4,486,000. This amount is based on each day in the 153-day control period constitutes a day of violation. The footnote states that each day, during which a violation continues, constitutes an additional, separate, and distinct offense. The penalty calculation is then: \$2,000 + \$4,000 + \$10,000 + [149 days x \$30,000 per day] = \$16,000 + \$4,470,000 = \$4,486,000. Each additional ton would cost an additional 4.5 million dollars. Penalties should be consistent with the Model Rule Concept and only slightly higher than the next RACT step. Extremely high penalties could destroy market trades by encouraging speculation on the end of season market. {22}

At N.J.A.C. 7:27A-3.10, the proposed penalty provisions are unreasonably punitive. Under the present proposal, if a facility surrenders even one allowance less than the NO<sub>x</sub> tons emitted during the ozone season, that source is potentially subject to 154 separate violations (153 days ozone season plus one of excess emission). Each of these violations is subject to a potential penalty of \$2,000 with a total potential penalty of \$308,000.00. In addition, future NO<sub>x</sub> allowances are deducted from the compliance account at a rate of three NO<sub>x</sub> allowances for every one ton of excess emissions per N.J.A.C. 7:27-31.19(a). A more reasonable, but

adequately punitive, proposal would be to determine the number of days during an ozone season for which insufficient NO<sub>x</sub> allowances are surrendered. This number should represent the number of violations. Additionally, future NO<sub>x</sub> allocations should be deducted at a ratio of one NO<sub>x</sub> allowance for every one ton of excess emissions. Surrender of future NO<sub>x</sub> allowances should not be excessive due to the limited number of allowances in the NO<sub>x</sub> budget and potential to create future inability to comply by reducing the size of the allowance budget.

500	=	Available NO <sub>x</sub> allowances at "true-up"
600	=	Tons of actual ozone season NO <sub>x</sub> emissions
September 19	=	Last day on which all NO <sub>x</sub> emissions are fully accounted with NO <sub>x</sub> allowances
No. of violations	=	11 (September 20 - September 30)
No. of future allowances surrendered	=	100
Potential Penalty	=	11×\$2,000 = \$22,000 plus the loss of 100 future allowances at a value of \$500-\$5,000 each (\$50,000 - \$500,000) {3}

With regard to the number of days a source is considered to be out of compliance (N.J.A.C. 7:27A-3.10(m)31, Footnote 7), it is unfair to presume that the source is in violation for the entire control period if there were at least some allowances in the compliance account at the time of reconciliation. These allowances can easily be seen as covering operation at the beginning of the control period, up to the point at which the supply would be exhausted. It does not make sense to consider a source lacking one allowance, which might be equivalent to emissions the last day of operation in the control period, in the same light as a source which is lacking allowances which represent emissions from a much longer period. The number of days in violation should be the percentage of total operating days which is proportional to the percentage allowance shortfall. Also, with regard to the requirement to hold adequate allowances, there should be some distinction made between a company which has not distributed enough allowances into a specific source account, but still has enough allowances for all its sources, and a company which simply does not have enough allowances overall. There should not be many mistakes made in account balancing, but given that some companies have a number of sources, it could happen, and if it does, it is really just a paperwork violation, and should be treated as such. {8}

RESPONSE: The Department recognizes that the penalty provision referenced in these comments is confusing. When proposing the penalty provisions (based upon the OTC model rule) the Department did not intend to multiply the number of excess tons by 153 to determine the number of violations. The proposed penalty provision for violations of N.J.A.C. 7:27-31.3(i) is contrary to the statutory maximum penalty limit of \$10,000 per day for the first offense level, \$25,000 per day for the second offense level and \$50,000 per day for the third and each subsequent offense levels. The Department is therefore reserving the penalty for violations of N.J.A.C. 7:27-31.3(i) upon adoption and will propose revised provisions.

189. COMMENT: In the penalty table, regarding N.J.A.C. 7:27-31.13(i), this citation should refer to both N.J.A.C. 7:27-31.13(h) and (i). {1}

RESPONSE: The citation has been corrected to subsection (g), which refers to both subsections (i) and (j).

190. COMMENT: “There are” should be added to the footnote to read as follows: “For purposes of determining the number of days of violation, if there are any NO<sub>x</sub> emissions.....” {1}

RESPONSE: For the reasons mentioned in the response to comment #188, this footnote is being removed upon adoption.

### **Agency Initiated Changes**

1. N.J.A.C. 7:27-31.2 - At the definition of “New Jersey budget or “New Jersey emission budget”, the term used in the Subchapter is exclusively “New Jersey emission budget.” Therefore the Department has removed reference to “New Jersey budget” in this definition. Additionally, where the term is used in the Subchapter, the Department has corrected “New Jersey emissions budget” to “New Jersey emission budget.”
2. N.J.A.C. 7:27-31.2 - At the definition of “Net electric output”, the Department has clarified that the definition applies to all units that generate electricity rather than just to units that generate only electricity. This change does not actually alter the effect or burden on regulated entities. Rather it mirrors the change, as mentioned in response to comment #16, in which the terms “net useful work” and “net useful heat output” are consolidated.
3. N.J.A.C. 7:27-31.7(b)5ii, Table 1 - The Department has removed the second column of this table. This column was proposed for review purposes to show the origin of the percent figures and does not have any effect. The Department is similarly removing the note to the table. The note has no effect. It was proposed for review purposes by explaining the difference between the 1999 base emission budget and the total of the figures in the second column of the table.
4. N.J.A.C. 7:27-31.8(c)1ii(3) - This provision is modified from “Does not cause an increase in HAP emissions” to read as follows: “Does not cause an increase in emissions of any HAP.”
5. N.J.A.C. 7:27-31.8(c) - The Department has amended this provision in order to allow environmentally beneficial energy generation techniques the ability to submit claims as intended in the proposed rules. This provision allows the owners and operators of environmentally beneficial energy generators to submit claims to receive incentive allowances. In proposing the rule, the Department listed several techniques that are eligible. This Department intended this list to be illustrative, but not the entire universe of eligible energy generation techniques. Therefore, the Department has amended this provision to include owners or operators of other energy generation techniques to the persons eligible to submit claims. The Department has also added reference to this new provision at N.J.A.C. 7:27-31.8(g)2.
6. N.J.A.C. 7:27-31.12(c)4iii - The undefined term “net electric generation” is changed to the defined term “net electric output.”
7. N.J.A.C. 7:27-31.12(e)1iii - The Department has clarified that for establishing a baseline emission rate for the purpose of early reductions, if the source’s lowest allowable emission rate during the baseline period is an alternative emission limit, then the “rule” RACT rate shall be

used as the baseline emission rate. The clarifies that a budget source may not generate early reductions for reducing NO<sub>x</sub> emissions from the Alternative Emission Limit down to the presumptive RACT limit as established at N.J.A.C. 7:27-19. This change does not actually alter the effect or burden on regulated entities because the alternate emission limits are established in recognition that a lower emission limit rate applies to the unit and that the difference between the AEL limit and the RACT limit is required to be compensated by Discrete Emission Reductions. This change is a clarification of the principles upon which early reductions are creditable. The permittee's fundamental responsibility to meet the RACT limit is established in the NO<sub>x</sub> RACT rules at N.J.A.C. 7:27-19. A permittee is granted a higher AEL because they have demonstrated to the Department that they are not able to reasonably meet the RACT limit in specified in the RACT rules. If conditions change such that the permittee now can meet the RACT limit, this action merely addresses their fundamental responsibility under subchapter 19. This change is a clarification that a reduction of emission rate from meeting an AEL to a RACT limit is not an early voluntary reduction beyond requirements already in place.

8. N.J.A.C. 7:27-31.13(c)2 and 3 - The Department has clarified the types of accounts to be created in the NO<sub>x</sub> Allowance Tracking System for allocation and compliance purposes.
9. N.J.A.C. 7:27-31.13(d)1 and 2 - The Department has eliminated the superfluous examples given regarding the creation of general accounts.
10. N.J.A.C. 7:27-31.14(b) - The Department has clarified that a total of three copies of the monitoring plan are required to be submitted as mentioned at the January 8, 1998 NO<sub>x</sub> Budget Implementation Workshop. The three copies are necessary to aid in expediting the review and approval of the monitoring plans. The Department has also clarified that a monitoring plan includes both information to be submitted on diskette and information to be submitted as paper attachments.
11. N.J.A.C. 7:27-31.14(c) - The Department has amended the date by which monitoring systems are required to be installed and in operation. The Department proposed a date, July 1, 1998, which precedes the operative date of the rule and precedes the date by which monitoring plans are due to the Department. Upon adoption, the Department has tied the date by which monitoring systems must be in operation to the approval of the monitoring plan. The monitoring systems shall be installed and in operation by no later than 60 days after the Department approves the monitoring plan or no later than a date specified within the monitoring plan approval. This adopted provision provides sufficient time for monitoring systems to be installed in accordance with the approval of the monitoring plan. This change is also reflected at N.J.A.C. 7:27-31.14(g).
12. N.J.A.C. 7:27-31.14(c) - The Department has clarified that a test notification and protocol must be submitted to the Department's Bureau of Technical Services at least 30 days in advance of certification testing. This specification in the rule is advisory that the Department will set a condition of approval of the monitoring plan of such requirement. As such, this provision does not alter the compliance burden of regulated entities.

13. N.J.A.C. 7:27-31.14(d) - In a manner consistent with clarification made to the rule in response to comment #158, the Department has clarified that monitoring plans for new sources need not be submitted in conjunction with the permit application (before it is known whether the source would be built), but as provided in the conditions of the permit approval.
14. N.J.A.C. 7:27-31.17(h) - The Department has clarified that the allowance adjustment to account for any errors due to data that is subsequently found to be inaccurate is to be made at the direction of the Department. This adjustment will be requested by the Department to the NATS administrator.

### **Federal Standards Statement**

In accordance with Governor Whitman's Executive Order No. 27 (1994), the Department has reviewed the standards and requirements of the proposed new rules, and compared them with the standards and requirements imposed by the CAA and 40 C.F.R. Part 70. The Department has found that the proposed new rules do not exceed the requirements imposed by Federal law.

**Full text** of the adoption follows (deletions indicated in brackets with asterisks \*[thus]\*; additions indicated in boldface with asterisks **\*thus\***):

## SUBCHAPTER 31. NO<sub>x</sub> BUDGET PROGRAM

### 7:27-31.1 Purpose and scope

This subchapter establishes a NO<sub>x</sub> Budget Program in New Jersey which, beginning in 1999, limits emissions from stationary sources of NO<sub>x</sub>. It sets forth requirements for the monitoring, recordkeeping, and reporting of NO<sub>x</sub> emissions and for certification of compliance with this program. It makes available a trading mechanism, which allows intrastate trading as well as interstate trading. In order to support the trading mechanism, this subchapter establishes rules and procedures for the allocation of the tradeable units (that is, allowances); the transfer, use, and retirement of the allowances; and the tracking of the allowances.

### 7:27-31.2 Definitions

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

“AAR” means authorized account representative.

“Account” means the place in the NO<sub>x</sub> Allowance Tracking System where allowances are held for a specific person or purpose. Such a place may be a compliance account, a general account, or a retirement account.



“Account number” means the identification number given by the NATS Administrator to an account in which allowances are held in the NO<sub>x</sub> Allowance Tracking System pursuant to N.J.A.C. 7:27-31.13, NO<sub>x</sub> Allowance Tracking System.

“Acquiring account” means the account in an allowance transfer to which allowances are conveyed.

“Allocate” or “allocation” means:

1. In respect to New Jersey, the assignment of allowances pursuant to N.J.A.C. 7:27-31.7, Annual Allowance Allocation; or in respect to another jurisdiction, the assignment of allowances pursuant to that jurisdiction’s comparable rules; and
2. The recording of the assigned allowances by the NATS Administrator in the appropriate NO<sub>x</sub> Allowance Tracking System compliance account or general account.

“Allowance” means a tradeable unit which represents the limited authorization to emit one ton of NO<sub>x</sub> during a control period.

“Allowance deduction” means the withdrawal by the NATS Administrator of one or more allowances from a NO<sub>x</sub> Allowance Tracking System general account or compliance account and the recording of such allowances in a retirement account. **\*As prescribed in the procedures at N.J.A.C. 7:27-31.17 and 31.19, allowance deduction events relating to end-of-season reconciliation and penalty deductions may only be made from compliance accounts. As prescribed at N.J.A.C. 7:27-31.10, allowance deduction events relating to voluntary retirement may be made from a compliance account or a general account\***

“Allowance transfer” means the withdrawal by the NATS Administrator of one or more allowances from a NO<sub>x</sub> Allowance Tracking System general account or compliance account and the recording of such allowances in a different general account or compliance account.

“Allowance transfer deadline” means midnight of December 31 of a given **\*calendar\*** year, and is the deadline by which an allowance transfer request may be submitted to the NATS Administrator to effect an allowance transfer for the purpose of meeting the requirement of N.J.A.C. 7:27-31.3(i) for the year’s control period.

“Alternative monitoring system” means a monitoring system other than a CEMS, or component of such a system, that is designed to determine mass emissions per time period, air contaminant concentrations, or volumetric flow of a given source or group of sources, as provided for in N.J.A.C. 7:27-31.14, Emissions monitoring.

“Authorized account representative **\*(AAR)\***” means the responsible individual designated in writing by the person who holds an account. This individual (or his or her alternate) is the sole person who has the authority, on behalf of the account, to submit allowance transfer requests to the NATS Administrator, and to as certify and submit reports to the NATS and the NETS.

“Banked allowance” means an allowance in a general account or a compliance account which has been neither used to reconcile emissions in the year it was originally allocated nor retired, and which

is therefore carried forward in the account into the next year or into successive future years. The NATS Administrator shall flag such an allowance as “banked.”

“Banking” means the retention in a general account or a compliance account of one or more allowances that were allocated for use in the current or in a previous control period, but have been neither used nor retired. Such allowances may be used or retired in a future control period.

“Base budget” or “base emission budget” means the emissions budget for each control period that has been developed by applying the emission limits, jointly agreed to by the jurisdictions who are signatories of the OTC MOU, to the baseline sources’ baseline emissions. This term when used in respect to:

1. A specific OTR jurisdiction, is the emission budget so established for that jurisdiction; and
2. The OTR as a whole, is the sum of the emission budgets so established for all jurisdictions in the region.

“Baseline” means, when used in reference to the emissions or productivity of a source, one of the following:

1. For an opt-in source, the average emissions or average productivity of that source during the two consecutive May 1 through September 30 periods on which the increase in the New Jersey \*[emissions]\* **\*emission\*** budget made to accommodate the source was based, pursuant to N.J.A.C. 7:27-31.4; or
2. For a baseline source, the emissions or productivity attributed to that source in the 1990 baseline NO<sub>x</sub> emission inventory.

“Baseline NO<sub>x</sub> emission inventory” means the emissions inventory which developed jointly by all jurisdictions in the OTR and which sets forth, for all baseline sources, the NO<sub>x</sub> emissions of these sources for the period May 1 and September 30, 1990. This inventory is the emission baseline from which emission reductions are calculated for purposes of determining the effectiveness of the NO<sub>x</sub> Budget Program in limiting NO<sub>x</sub> emissions.

“Baseline source” means a source which is one of the following and which operated during the May 1 through September 30 period in 1990:

1. A fossil fuel fired boiler or indirect heat exchanger with a maximum rated heat input capacity of at least 250 MMBtu per hour; or
2. An electric generating unit with a rated output of at least 15 MW.

“Boiler” means an indirect heat exchanger which combusts fossil fuel to produce steam, or to heat water or any other heat transfer medium.

“British Thermal Unit” means the quantity of heat required to raise the temperature of one avoirdupois pound of water \*[from 63 to 64]\* **\*one degree Fahrenheit at 39.1\*** degrees Fahrenheit.

“Btu” means British Thermal Unit.

“Budget source” means any of the following sources located in \*[a]\* the OTR:

1. A fossil fuel fired indirect heat exchanger with a maximum rated heat input capacity of at least 250 MMBtu per hour;
2. An electric generating unit with a rated output of at least 15 MW; or
3. Any source that has been approved as an opt-in source.

“CEMS” means continuous emission monitoring system.

“Clean Air Act” means the Federal Clean Air Act as amended in 1990 (42 U.S.C. §§7401 through 7626).

“Compliance account” means an account in the NATS where allowances are held in order to be available for use in complying with end-of-season reconciliation requirements pursuant to N.J.A.C. 7:27-31.3(i). The number of allowances in the account will be increased if allowances are allocated to the account or if allowances are transferred into the account from another account. The number of allowances in the account will be decreased if allowances in the account are transferred from the account into another account or if the NATS Administrator makes an allowance deduction for compliance purposes. Each compliance account is associated with a specific budget source.

“Continuous emissions monitoring system” means a system of equipment that samples, analyzes, and determines, on a continuous basis \*(at least once every 15 minutes)\*, for a given source or group of sources, mass emissions of one or more air contaminants per time period \*and per heat input\*, and that records the results in order to provide a permanent record of such data. The following are component parts of a continuous emissions monitoring system required under this subchapter:

1. Nitrogen oxides pollutant concentration monitor;
2. Diluent gas monitor (oxygen or carbon dioxide);
3. Flow monitoring systems (flue gas flow or fuel flow); and
4. A data acquisition and handling system.

“Control period” means, for the year 1999 and thereafter, the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

“Current year” means the present calendar year.

“Department” means the New Jersey Department of Environmental Protection.

“DER credit” means a discrete emission reduction credit pursuant to N.J.A.C. 7:27-30.

“Early reduction allowance” means an allowance based on NO<sub>x</sub> emission reductions that meet the criteria specified in N.J.A.C. 7:27-31.12, Early reductions, and that occurred during the period May 1 through September 30, 1997, or the period May 1 through September 30, 1998; or that occurred during both such periods.

“Electric generating unit” means any fossil fuel fired combustion unit of 15 MW capacity or greater which provides electricity for sale or use. This term does not include a waste-to-electricity unit.

“Emissions budget” means a limit or “cap” on the number of tons of NO<sub>x</sub> emissions which are allowed to be emitted. This limit is effected by constraining the amount of allowances allocated to a number which does not exceed the number of tons set for the emissions budget.

“Energy efficiency project” means a project which:

1. Is implemented by ***\*,or on behalf of,\**** an electric consumer;
2. Reduces the consumer’s consumption of electricity;

*\*[(AGENCY NOTE: Two alternatives are set forth below for paragraph 3. The Department will adopt one of these two alternatives. The Department requests comments as to which of these two alternatives is preferable.)*

***ALTERNATIVE 1]\****

3. Belongs to a category included in the guidance document “Measurement Protocol for Commercial, Industrial and Residential Facilities,” issued by New Jersey’s Board of Regulatory Commissioners on April 28, 1993;

***\*[ALTERNATIVE 2***

3. Belongs to a category included in the guidance document “International Performance Measurement and Verification Protocol (IPMVP) for Accrediting Emission Reductions from Energy Efficiency” issued by the United States Department of Energy in March 1996;]\*
4. The electricity savings of the project is quantified in accordance with this measurement protocol; and
5. Does not entail the direct use of combustion equipment.

“Excess emissions” means emissions of NO<sub>x</sub> reported by a budget source during a control period which, as of the allowance transfer deadline following the control period, are greater than the emissions value of the allowances in the budget source’s compliance account.

“Fossil fuel” means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived wholly, or in part, from such material.

“Fossil fuel fired” means fueled by at least 51 percent fossil fuel on an annual heat input basis.

“General account” means an account in the NATS where allowances are held for a specific person. The number of allowances in the account will be increased if allowances are allocated to the account or if allowances are transferred into the account from another account. The number of allowances in the account will be decreased if allowances in the account are transferred from the account into another account. There are two types of general accounts:

1. Accounts associated with a person who requested the creation of the account pursuant to N.J.A.C. 7:27-31.13; and
2. Accounts utilized by the Department in the allocation process described at N.J.A.C. 7:27-31.7.

"Hazardous air pollutant" or "HAP" means an air contaminant listed in or pursuant to 42 U.S.C. §7412(b).

“Heat input” means the heat ***\*[content of the fuel combusted]\**** ***\*derived from the combustion of fuel\**** in a source. This term does not include the heat derived from preheated combustion air, recirculated flue gas, or exhaust from other sources.

“Indirect heat exchanger” means stationary source combustion equipment in which the flame and/or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls. Such equipment includes, but is not limited to, steam boilers, vaporizers, heat exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, fuel-fired reactors such as steam hydrocarbon reformer heaters and pyrolysis heaters.

“Industrial boiler” means a boiler that meets the following criteria:

1. No steam produced by the boiler is used to produce electricity that is sold or otherwise supplied to any utility power distribution system; and
2. No steam produced by the boiler is sold or otherwise supplied to a steam distribution system for the purpose of providing steam that would produce electrical energy for sale.

“Maximum rated heat input capacity” means the maximum amount of fuel that is able to be combusted per unit of time on a steady state basis in a given combustion device as determined by the physical design and characteristics of the combustion device. This amount (usually expressed in MMBtu per hour) is the product of the gross caloric value of the fuel (usually expressed in Btu per mass of fuel) and the fuel feed rate (usually expressed in mass of fuel per hour).

“MMBtu” means one million British Thermal Units.

“MW” means megawatt.

“MW-hr” means megawatt-hour.

“NATS” means NO<sub>x</sub> Allowance Tracking System.

“NATS Administrator” means the agency which is authorized, by New Jersey and the other jurisdictions implementing the NO<sub>x</sub> Budget Program, to administer and operate the NATS.

“Net electric output” means, for units generating *\*[only]\** electricity, the net busbar power leaving the plant; that is, the total electrical output generated minus the energy requirements for auxiliaries and emission controls.

“Net useful heat output” means *\*[the net useful work performed by the steam or heat generated,]\** ***\*one half of the useful thermal output\**** not *\*[including both]\** ***\*associated with neither\**** the energy requirements for auxiliaries and emission controls *\*[and]\** ***\*nor\**** the net electric output performed by the steam generated ***\*; that is, one half of the heat output associated with steam delivered to an industrial process\****.

*\*[“Net useful work” means, for cogeneration units, the net electrical output (that is, the net busbar power leaving the plant) plus one half the useful thermal output (that is, steam delivered to an industrial process).]\**

“NETS” means NO<sub>x</sub> Emission Tracking System.

“NETS Administrator” means the agency which is authorized, by New Jersey and the other jurisdictions implementing the NO<sub>x</sub> Budget Program, to administer and operate the NETS.

“New budget source” means, in respect to provisions of N.J.A.C. 7:27-31.7, Annual allowance allocation, a budget source that, as of May 1 of the current year, meets all of the following three criteria:

1. Is not an opt-in source;
2. Has been permitted to operate; and
3. Has not yet operated for two full May 1 through September 30 periods.

\*[“New Jersey budget” or]\* “New Jersey emission budget” means the base emission budget, plus the amount added for any sources that have been opted in to the NO<sub>x</sub> Budget Program pursuant to N.J.A.C. 7:27-31.4\*, **plus the one time amount added only in the year 1999 for any sources that have earned early reduction allowances pursuant to N.J.A.C. 7:27-31.12\*.**

“New Jersey holder” means, with respect to an account in the NATS, any of the following:

1. An owner or operator of a budget source located in New Jersey, for which there is a compliance account in the NATS; or
2. A person who has established a general account \*[or a retirement account]\* in the NATS, and who is located in New Jersey or conducts activities which are subject to this subchapter.

“NO<sub>x</sub>” means oxides of nitrogen.

“NO<sub>x</sub> Allowance Tracking System **\*(NATS)\***” means the system used to track allowances as they are allocated, transferred, used and retired.

“NO<sub>x</sub> Emissions Tracking System **\*(NETS)\***” means the system used to track NO<sub>x</sub> emissions from budget sources.

“Non-Part 75 budget source” means any budget source not subject to the requirements for emissions monitoring adopted pursuant to §412 of the Clean Air Act Amendments of 1990 and codified at 40 C.F.R. Part 75.

“Opt in” means voluntarily to choose to have a given source, which otherwise is not mandated to be a budget source, participate in the NO<sub>x</sub> Budget Program and comply with the terms and conditions of this subchapter.

“Opt-in source” means a stationary source which has been opted in the NO<sub>x</sub> Budget Program. If the source is located in New Jersey, this source shall have been approved pursuant to N.J.A.C. 7:27-31.4, Opt in provisions. If the source is located in another jurisdiction in the OTR, this source shall be approved pursuant to the equivalent requirements established in that jurisdiction.

“OTC” means Ozone Transport Commission.

“OTC MOU” means the Memorandum of Understanding signed by representatives of States that are members of the OTR and the District of Columbia on September 27, 1994, or later. The signing of

this document constituted a commitment by the signatories to develop and implement the NO<sub>x</sub> Budget Program in each of their jurisdictions.

“OTR” means the Ozone Transport Region, as designated by §184(a) of the Clean Air Act Amendments of 1990. This region is comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont; the District of Columbia; and the following counties of the State of Virginia: Arlington, Fairfax, Loudoun, and Prince William.

“Ozone Transport Commission” means the organization established pursuant to §184(a) of the Clean Air Act Amendments of 1990. The members of this commission include an air pollution control official from each of the following jurisdictions: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and Virginia.

“Owner or operator” means any person who is an owner or who operates, controls or supervises a source and shall include, but not be limited to, any holding company, utility system or plant manager.

“Oxides of nitrogen” means all oxides of nitrogen, except nitrous oxide, as measured by test methods required under this subchapter.

“Properly quantified” means, in reference to emission reductions, has been quantified on a reliable and replicable basis that is acceptable to the Department and to the USEPA.

“Real” means, in reference to emission reductions, possessing the following characteristics:

1. Represents a reduction in emissions which is not due to the shutdown or curtailment of the productivity of the source;
2. Has been quantified retrospectively; and
3. Is net of any consequential increase in actual emissions due to any resultant shifting of demand.

“Recorded” means, in reference to an allowance transfer or an allowance deduction, that \*[the records of the account from which one or more allowance are being removed have been updated by the NATS Administrator and, in the case of an allowance transfer, that the records of the acquiring account have been updated to reflect the allowance increase]\* **\*means, in reference to an allowance transfer or an allowance reduction, that an account in the NATS has been updated by the NATS Administrator to reflect the details of an allowance transfer or allowance deduction\*.**

“Repowering” means, for the purpose of generating early reduction credit:

1. The installation of equipment which is Qualifying Repowering Technology as defined by 40 C.F.R. Part 72; or
2. The replacement of a budget source either by a new combustion source or by the purchase of heat or power from the owner of a new combustion source provided that:
  - i. The replacement source (regardless of owner) is on the same property or on a contiguous property as the budget source being replaced;

- ii. The replacement source has a maximum useful heat output rate (including electric power) that is equal to or greater than the maximum heat output rate of the budget source being replaced; and
- iii. Relative to the performance of technology in widespread commercial use as of November 15, 1990, the replacement source incorporates technology which better controls the emission of the air contaminants from the combustion process, while simultaneously improving fuel efficiency.

“Retirement account” means \*[an account in the NATS where allowances that are held which have already been used or have been permanently retired and therefore will never available for use]\* **\*a NATS account which holds used or permanently retired allowances\***. The number of allowances in \*[the]\* **\*that\*** account \*[shall]\* **\*can\*** be increased if **\*additional\*** allowances are transferred into \*[the account]\* **\*it\*** from another account. The number of allowances in the account shall never decrease **\*, except in the case when an error is being corrected\***. There are two types of retirements accounts:

1. Accounts into which the NATS administrator deposits allowances deducted from compliance accounts pursuant to the end-of-season reconciliation procedures described at N.J.A.C. 7:27-31.17; and
2. Accounts into which the NATS administrator deposits allowances that are permanently retired at the request of the AAR of a general account or a compliance account.

“State Implementation Plan” or “SIP” means a plan for the attainment of any National Ambient Air Quality Standard, prepared by a state and approved by the USEPA pursuant to Section 110 of the Clean Air Act (42 U.S.C. §§1857 et seq.).

“Source operation” or “source” means any process, or any identifiable part thereof, that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

“Submitted” means \*[, in respect to submissions to the NATS or NETS,]\* signed by the authorized account representative and sent to the appropriate agency. **\*For purposes of determining when a document has been submitted, an official U.S. Postal Service postmark or an equivalent official indication by another mail delivery service shall establish the date of submittal. For purposes of determining when an electronic transmission has been submitted, the electronic time stamp of the receiving agency shall establish the date of submittal.\***

“Surplus” means, in reference to emission reductions:

1. Not required pursuant to any air quality emission limit or standard in any applicable law, regulation, or order;
2. Not relied upon in a SIP submitted by the State at the time the reduction was made, including in an attainment demonstration that applies to the air quality control region in which the emission reductions occur; and
3. Not required pursuant to a permit, unless the permit expressly states that the emission reductions (or a portion of such reductions) are being made voluntarily and are not the consequence of any requirement.



“USEPA” means the United States Environmental Protection Agency.

### 7:27-31.3 Applicability and general provisions

- (a) The provisions of this subchapter apply to the owner or operator of any budget source located in New Jersey. This shall include the owner or operator of any baseline source and of any source “opted-in” to the NO<sub>x</sub> Budget Program pursuant to N.J.A.C. 7:27-31.4.
- (b) Each jurisdiction in the OTR which is implementing the NO<sub>x</sub> Budget Program is establishing a base emission budget for the control period in each year, commencing with the year 1999. The base emission budget for New Jersey is as follows:
  - 1. 17,340 tons of NO<sub>x</sub> for the years 1999, 2000, 2001, and 2002; and
  - 2. 13,022 tons of NO<sub>x</sub> for the year 2003 and each year thereafter.
- (c) Beginning in 1999, the Department shall allocate each year a number of allowances not exceeding the number of tons in the base emission budget for that year, plus an additional number of allowances added to accommodate opt-in sources, pursuant to N.J.A.C. 7:27-31.4. For each year the NATS Administrator shall initially assign allowances equal to New Jersey’s base emission budget, plus the allowances for the opt-in sources, to New Jersey’s \*“primary”\* **\*“authority”\*** account in the NATS. **\*This “authority” account contains the Department’s authority to create a fixed number of allowances, upon which the allowances will be assigned serial numbers and upon which they will be transferred into the Department’s “primary” account.\*** This “primary” account is a general account held by the Department from which it allocates allowances.
- (d) All allowances shall be held in \*[an account in]\* **\*accounts within\*** the NO<sub>x</sub> Allowance Tracking System (NATS), as described at N.J.A.C. 7:27-31.13, NO<sub>x</sub> Allowance Tracking System. These allowances shall include only the following:
  - 1. Allowances which reflect each year’s base emission budget;
  - 2. Allowances created to accommodate opt-in sources pursuant to N.J.A.C. 7:27-31.4; and
  - 3. Allowances based on early reduction credits pursuant to N.J.A.C. 7:27-31.12.
- (e) In the years 1999 through 2002, the Department shall allocate all the allowances comprising the base emission budget for New Jersey in accordance with N.J.A.C. 7:27-31.7, Annual allowance allocation. In the year 2003 and each year thereafter, the Department shall first reserve 4,822 of the allowances in the base emission budget for New Jersey, by transferring them into \*[a discretionary general]\* **\*the attainment reserve\*** account held by the Department, and shall then allocate the remainder of the allowances in the base budget (that is, 8,200 allowances). In the judgement of the Commissioner, the Department shall only either retire an allowance \*[reserved]\* **\*deposited\*** in the \*[discretionary account]\* **\*attainment reserve\*** or use it for

any other purpose which would contribute toward the attainment or maintenance of the National Ambient Air Quality Standard for ozone in New Jersey. **\*If the Department intends to use any allowance in the attainment reserve account for any purpose other than retirement, the Department shall publish a notice in the New Jersey Register. This notice shall provide the public an opportunity for comment regarding the intended use. This public comment period shall be at least 30 days from publication of the notice.\***

- (f) A New Jersey holder of an account in the NATS is subject to the applicable requirements of this subchapter. This includes the requirement, set forth at N.J.A.C. 7:27-31.13, NO<sub>x</sub> Allowance Tracking System, to designate an authorized account representative (AAR). Only the AAR of an account may authorize the transfer of an allowance from the account to another account in accordance with the procedures set forth at N.J.A.C. 7:27-31.10, Allowance transfer, use, and retirement.
- (g) Pursuant to N.J.A.C. 7:27-31.16(c), the owner or operator of each budget source located in New Jersey shall monitor the emissions of each budget source in accordance to the monitoring plan approved by the Department pursuant to N.J.A.C. 7:27-31.14, Emissions monitoring, and report the source's actual NO<sub>x</sub> emissions during that year's control period to the NETS Administrator. At the request of the member jurisdictions of the OTC, the United States Environmental Protection Agency's Acid Rain Division has agreed to serve as the NETS Administrator. Correspondence for NETS Administrator shall be addressed as follows:

ATTN: NOX BUDGET PROGRAM  
United States Environmental Protection Agency  
Acid Rain Division - Mail Code 6204J  
401 M Street SW  
Washington, DC 20460

- (h) The date of a submission to the NATS or NETS shall be considered to be the date indicated by the official U.S. Postal Service postmark on the envelope in which the document is mailed or, if the submission is made electronically, the electronic time stamp of the receiving agency.
- (i) In the year 1999 and in each year thereafter, the owner or operator of a budget source shall ensure that, by the allowance transfer deadline, the allowances which are held for the budget source in a compliance account and which are valid for use in the current year are equal to or greater than the allowances to be deducted from the account pursuant to N.J.A.C. 7:27-31.17, End-of-season reconciliation. The number of allowances to be deducted is equal to the total number of tons NO<sub>x</sub> actually emitted from the budget source during that year's control period as reported pursuant to (g) above.
- (j) Following each year's control period, the NATS administrator shall deduct and permanently retire allowances from each budget source's compliance account to reconcile the emissions of the budget source during the preceding control period pursuant to N.J.A.C. 7:27-31.17, End-of-season reconciliation.

- (k) All allowances shall be allocated, transferred, used, or retired as whole allowances. Unless otherwise specified, in any computation to determine the number of whole allowances to be allocated, transferred, used or retired, the amount of allowances shall be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater. Also, unless otherwise specified, in any computation to calculate emissions, including emissions during the May 1 and September 30 period in 1990 under N.J.A.C. 7:27-31.4, Opt-in provisions, or N.J.A.C. 7:27-[21.12]\* **31.12**\*, Early reductions, the NO<sub>x</sub> emissions shall be rounded down to the nearest ton for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.
- (l) Allowances are valid only for the purposes of meeting the requirements of this subchapter and cannot be used to authorize the exceedance of the limitations of a permit or of another applicable rule or regulation.
- (m) An allowance shall not constitute a security and does not constitute or convey a property right. Nothing in this subchapter shall be construed to limit the authority of the Department to condition, limit, suspend or terminate any allowances or authorization to emit which said allowance represents.
- (n) Nothing in this subchapter waives any Federal or State requirement that otherwise applies to a budget source, including, but not limited to: the Reasonably Available Control Technology standards for NO<sub>x</sub> at N.J.A.C. 7:27-19; requirements pertaining to the construction of new or modified sources at N.J.A.C. 7:27-8, 18 and 22; and the requirements pertaining to the federal acid rain program at 40 C.F.R. \*[Part 75]\* **Parts 72 through 78**.\*
- \*(o) Any person who submits information to the Department may assert a confidentiality claim for that information in accordance with N.J.A.C. 7:27-1.6. Emissions information, as defined at N.J.A.C. 7:27-1.4, is not confidential. The Department will process and evaluate confidentiality claims in accordance with N.J.A.C. 7:27-1.6 through 1.30 inclusive.\***

#### 7:27-31.4 Opt-in provisions

- (a) An owner or operator of a stationary source, that is neither a fossil fuel fired \*[boiler or]\* indirect heat exchanger with a maximum rated heat input capacity of at least 250 MMBtu per hour nor an electric generating unit with a rated output of at least 15 MW, may request approval from the Department to opt the source into the NO<sub>x</sub> Budget Program in accordance with the provisions of this section.
- (b) Any person seeking to opt a stationary source into the NO<sub>x</sub> Budget Program shall submit the information required by this section, on application forms obtained from the Department, to the following address:

ATTN: NOX BUDGET OPT-IN  
New Jersey Department of Environmental Protection  
Office of Air Quality Management  
401 East State Street -- P.O. Box 418  
Trenton, NJ 08625-0418

- (c) An application submitted pursuant to (b) above shall include the following information:
1. Identification of the owner of the proposed opt-in source, including the name of the company, its mailing address, and telephone number;
  2. Identification of the proposed opt-in source, including the facility identification number, source identification number, fuels allowed to be burned, heat input capacity of the source, lowest allowable NO<sub>x</sub> emission rate for each type of fuel allowed to be burned, any other applicable limits on operation;
  3. Information regarding the operation of the proposed opt-in source during the period May 1 through September 30 for each of the five preceding years. This information will be used by the Department in order to determine the baseline emissions. Such information includes, for each type of fuel burned, and for each of the five previous control periods (or, if the source has operated for less than five years, for the control periods in each year of operation):
    - i. The source's actual heat input, expressed in MMBtu;
    - ii. The source's NO<sub>x</sub> emissions, expressed in pounds;
    - iii. The total productivity of the source expressed in MW-hr of net electric output and, for source that produces useful heat, in MMBtu of net useful heat output; and
    - iv. Documentation as to how (c)3i through iii above were determined;
  4. An emission monitoring plan for the source operation consistent with the requirements at N.J.A.C. 7:27-31.14 and the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program\*[.]\* \*,\* " \*[This guidance document, which was prepared for the OTC and USEPA and prepared by Perrin Quarles Associates, Inc., January 28, 1997, is incorporated herein by reference, as are any subsequent revisions thereto. Copies of this document may be downloaded from USEPA Acid Rain Division's world wide web page, at <<http://www.epa.gov/acidrain>>, or may be requested by writing to the following address:

ATTN: NOX BUDGET PROGRAM  
United States Environmental Protection Agency  
Acid Rain Division - Mail Code 6204J  
401 M Street SW  
Washington, DC 20460]\*

5. Designation of an AAR pursuant to N.J.A.C. 7:27-31.13; and
  6. Any other information requested by the Department for use in its review of the application.
- (d) Based on the information submitted pursuant to (b) above, the Department shall determine the amount of allowances that would be added to the New Jersey emission budget each year to accommodate the source, if it is approved as an opt-in source. This amount shall be determined in accordance with *[(i) and] (j)* below. **\*This amount shall only be added for the years following approval of the source as an opt-in source.\***
- (e) The Department shall not approve an application for an opt-in if:
1. The applicant fails to:
    - i. Provide the information required pursuant to (c) above; or
    - ii. Propose in the monitoring plan a method for quantifying emissions from the source of sufficient accuracy and reliability on which to base determination of the source's compliance each year with N.J.A.C. 7:27-31.3(i); or
  2. The proposed opt-in source is not a type of source for **\*which\*** an emissions monitoring plan consistent with the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program" and the requirements at N.J.A.C. 7:27-31.14 can be developed.
- (f) If the Department reaches a preliminary determination to approve an opt-in application, the Department shall publish notice of this intent in the New Jersey Register and provide the interested public an opportunity to comment. In addition, the Department will seek comment from the members of the OTC who are also implementing NO<sub>x</sub> Budget Programs. The notice shall specify the amount by which the Department intends to increase the New Jersey *[emissions]\* **\*emission\**** budget each year to accommodate the proposed opt-in source. The comment period shall be at least 30 days commencing with the Register's date of publication. The Department shall take into consideration the comment received during the public comment period when making its final determination as to whether to approve the opt-in application.
- (g) Upon approval of the opt-in application, the source shall be considered a budget source and shall be subject to all terms and conditions of the NO<sub>x</sub> Budget Program, including requirements for allowance transfer or use, emissions monitoring, recordkeeping, reporting, and penalties.
- (h) If, at the time of approval of an opt-in application, the amount by which the Department increases the New Jersey *[emissions]\* **\*emission\**** budget in any given year to accommodate the opt-in source is more than the amount specified in New Jersey Register notice, published pursuant to (f) above, the Department shall publish a second notice in which it specifies this revised amount and sets forth the reasons for this revision.

- (i) **\*(Reserved.)\*** \*[If an opt-in source has a maximum rated heat input capacity of 250 MMBtu per hour or greater, the number of allowances to be added to the New Jersey emissions budget to accommodate the source shall be determined as follows:
1. The Department shall select the two consecutive annual May 1 through September 30 periods, from the five years preceding the opt-in application, during which the actual operation of the source best represents, in its judgement, normal activity for the source;
  2. The source's actual average baseline heat input and average baseline NO<sub>x</sub> emissions rate shall be determined for the two consecutive May 1 through September 30 periods selected pursuant to (i)1 above;
  3. For the years 1999, 2000, 2001, and 2002, the number of allowances to be added to the New Jersey emissions budget shall be the amount which is the least of the following:
    - i. The source's actual average baseline heat input, as determined in (i)2 above, multiplied by the greater of the following rates:
      - (1) The rate which is 35 percent of the source's average baseline NO<sub>x</sub> emissions rate, as determined in (i)2 above; or
      - (2) The rate of 0.20 pounds per MMBtu;
    - ii. The sum of the products obtained by multiplying the lowest allowable NO<sub>x</sub> emission rate applicable at the time of the application for each fuel by the actual average baseline heat input for that fuel; and
    - iii. The maximum allowable NO<sub>x</sub> emissions during a control period as established by any permit or any law or rule; and
  4. For the year 2003, and each year thereafter, the number of allowances to be added to the New Jersey emissions budget shall be the amount which is the least of the following:
    - i. The source's actual average baseline heat input, as determined in (i)2 above, multiplied by the greater of the following rates:
      - (1) The rate which is 10 percent of the source's average baseline NO<sub>x</sub> emissions rate, as determined in (i)2 above; or
      - (2) The rate of 0.15 pounds per MMBtu;
    - ii. The sum of the products obtained by multiplying the lowest allowable NO<sub>x</sub> emission rate applicable at the time of the application for each fuel by the actual average baseline heat input for that fuel; and

- iii. The maximum allowable NO<sub>x</sub> emissions during a control period as established by any permit or any law or rule.]\*
- (j) \*[ If an opt-in source has a maximum rated heat input capacity of less than 250 MMBtu per hour, the]\* **\*The\*** number of allowances to be added to the New Jersey \*[emissions]\* **\*emission\*** budget to accommodate the source **\*for the years following approval of a source as an opt-in source\*** shall be determined as follows:
  - 1. Select the two consecutive annual May 1 through September 30 periods, from the five years preceding the opt-in application, during which the actual operation of the source best represents, in the judgement of the Department, normal activity;
  - 2. Determine the source's actual average baseline heat input and average baseline NO<sub>x</sub> emissions during the two consecutive May 1 through September 30 periods selected pursuant to (j)1 above;
  - 3. The number of allowances to be added to the New Jersey \*[emissions]\* **\*emission\*** budget shall be the amount which is the least of the following:
    - i. The source's average baseline NO<sub>x</sub> emissions, as determined in (j)2 above;
    - ii. The sum of the products obtained by multiplying the lowest allowable NO<sub>x</sub> emission rate applicable at the time of the application for each fuel by the actual average baseline heat input for that fuel; and
    - iii. The maximum allowable NO<sub>x</sub> emissions during a control period as established by any permit or any law or rule.
- (k) The total amount of allowances allocated to an opt-in source in any given year shall not exceed the final amount approved for the source, pursuant to (f) or (h) above. If the productivity of the source is curtailed, an amount of allowances shall be deducted pursuant to N.J.A.C. 7:27-31.17(g)3.
- (l) The Department shall reduce the total amount by which the New Jersey \*[emissions]\* **\*emission\*** budget is increased each year to accommodate a source, if a new rule or law establishes an applicable maximum allowable emission rate which is more stringent than the rate originally used to determine, under (d) and (h) above, the amount the budget would be increased to accommodate the source.
- (m) For any opt-in source which is subsequently repowered or replaced, the amount by which the New Jersey \*[emissions]\* **\*emission\*** budget is increased in any given year to accommodate the source shall continue to be the final amount originally approved for the opt-in source pursuant to (f) and (g) above. The source which is repowering or replacing the opt-in source shall continue to be allocated the full amount, provided that the productivity of the repowered or replaced source is at least as great as that of the original opt-in source and no new law or

rule establishes a lower allowable emissions limit applicable to the original opt-in source. Otherwise the amount shall be adjusted pursuant to (k) or (l) above, as applicable.

- (n) Each year, prior to December 31, the Department shall provide the following information to the Administrator of the NATS **\*and to USEPA, Region II\*** :
1. A list of all sources that are opt-in sources, including any new opt-in sources approved that year; and
  2. The number of allowances by which the current year New Jersey **\*[emissions]\*** **\*emission\*** budget has been increased, for each opt-in source, to accommodate that source.
- (o) An owner or operator who elects to opt a source into the NO<sub>x</sub> Budget Program shall not opt the source out of the program. The source shall remain in the program and remain subject to the requirements of this subchapter until:
1. The source has ceased to operate and:
    - i. Any permits and certificates issued for the source pursuant to N.J.A.C. 7:27-8 have been canceled; and
    - ii. The provisions of any operating permit issued pursuant to N.J.A.C. 7:27-22 pertaining to the source have been removed; or
  2. The source has been replaced, in which **\*case\*** the replacement source shall become a budget source.

#### 7:27-31.5 Interface with the emission offset program

- (a) Any owner or operator of a new or modified budget source which is subject to the emission offset requirements at N.J.A.C. 7:27-18 shall meet the applicable emission offset requirements of that subchapter as well as the requirements of this subchapter. Obtaining and holding sufficient allowances for a source under this subchapter does not relieve an owner or operator from the obligation also to obtain any required emission offsets.
- (b) Allowances shall be allocated from New Jersey's emissions budget to a new or modified budget source in accordance with N.J.A.C. 7:27-31.7. New Jersey's base emission budget is established at N.J.A.C. 7:27-31.3(b), and shall not be increased to accommodate the new or modified source.
- (c) If a budget source's emission reductions, which are creditable emission reductions under N.J.A.C. 7:27-18.5, are secured for use, by the owner or operator of the budget source or by another person, as NO<sub>x</sub> emission offsets for a source which is not a budget source, the owner or operator of the budget source shall report this to the Department. The NATS administrator



shall deduct allowances from the budget source's compliance account commensurate in value, in terms of control period emissions, to the emission offsets secured for use by the source which is not a budget source, unless the owner or operator of the source using the emission offsets opts the source for which the emission offsets are being secured into the NO<sub>x</sub> Budget Program prior to the date the Department approves a permit for that source. However, if creditable emission reductions generated by a budget source are secured for use as NO<sub>x</sub> emission offsets by another budget source, no such deduction will be made.

#### 7:27-31.6 Interface with the open market emissions trading program

- (a) NO<sub>x</sub> emission reductions made by a budget source during any control period may not be used as the basis for a DER credit under N.J.A.C. 7:27-30.
- (b) Except as provided in the provisions for early reductions at N.J.A.C. 7:27-31.12, Early reductions, DER credits shall not be converted to allowances and used to satisfy the requirements of this subchapter.
- (c) Allowances shall not be converted to DER credits and used pursuant to the Open Market Trading Program rules at N.J.A.C. 7:27-30, except as provided at N.J.A.C. 7:27-31.8, which allows electric consumers who earn allowances by saving electricity through energy efficiency projects to elect to receive DER credits, instead of allowances. In such case the NATS Administrator shall permanently retire the allowances that would otherwise have been provided to the electric consumer.

#### 7:27-31.7 Annual allowance allocation

- (a) Beginning in 1999, the Department shall allocate allowances each year in accordance with this section. For the years 1999, 2000, 2001 and 2002, the Department shall allocate the New Jersey \*[emissions]\* **\*emission\*** budget in accordance with (b) and (c) below; for the year 2003 and each year thereafter, the Department shall allocate the New Jersey \*[emissions]\* **\*emission\*** budget in accordance with (d) and (e) below. In addition, in each of these years, the Department shall allocate additional allowances to opt-in sources in accordance with (f) below. Also, in the year 1999, the Department shall allocate allowances in accordance with (g) below to sources which have been approved to receive early reduction allowances pursuant to N.J.A.C. 7:27-31.12.
- (b) \*[Prior to the control period]\* **\*By April 1\*** in each of the years 1999, 2000, 2001, and 2002, the Department shall allocate 17,340 allowances of the New Jersey \*[emissions]\* **\*emission\*** budget, minus any allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h). This subsection does not apply to opt-in sources; opt-in sources are addressed separately in (f) below. The Department shall allocate allowances in accordance with the following steps:

1. Step 1: This step determines the number of allowances which are to be allocated to the New Source Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to new budget sources which have not operated for two full May 1 through September 30 periods. The number of allowances to be allocated to this reserve in this step is based on each new budget source's allowable emissions for the control period. For each new budget source, the Department shall allocate allowances from the New Jersey NO<sub>x</sub> emission budget into the New Source Reserve in accordance with the following equation:

$$\text{Allowances} = \frac{\text{Allowable Emission Rate} \times \text{Allowable Activity}}{2,000}$$

Where:

Allowable Emission Rate = The allowable emission rate, expressed in pounds per unit of activity. If more than one fuel is allowed to be used, the allowable emission rate shall be the weighted average of the allowable emission rates for each fuel type **\*; the weighting of this average shall be based on the maximum allowable consumption of the fuel associated with the highest allowable NO<sub>x</sub> emission rate. If the allowable emission rate for a given fuel is greater than 0.15#/MMBtu, then 0.15#/MMBtu shall be used as the allowable emission rate for the purpose of this equation\***;

Allowable Activity = The maximum allowable activity of the source for the control period which is based on the lesser of the maximum capacity and any limit on the activity during the control period as established by any law, rule or permit; and

2,000 = The factor converting pounds into tons;

2. Step 2: This step determines the number of allowances which are to be allocated to the Growth Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to certain budget sources to accommodate an increase in fuel use. The number of allowances to be allocated to this reserve in this step is based on up to a 50 percent increase in the average heat input of budget sources having emission rates not greater than 0.15 pounds per MMBtu. The number of allowances to be allocated to the reserve is calculated in accordance with the following procedure for each budget source that is not a new budget source:

- i. Calculate the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source, expressed in pounds per MMBtu, in accordance with the following equation:

$$ER_{NO_x} = \frac{E1 + E2}{H1 + H2}$$

Where:

E1 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

E2 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

ii. If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (b)2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to the source.

iii. If the average NO<sub>x</sub> Emission Rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (b)2i above is not greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with the following procedure:

(1) Calculate 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input in accordance with the following equation:

$$H_{150\%} = 1.5 \times \left( \frac{H1 + H2}{2} \right)$$

Where:

H<sub>150%</sub> = 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

(2) If H<sub>150%</sub>, as determined in (b)2iii(1) above, is not greater than the maximum allowable heat input of the source during the control period, then number of

allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times 0.5 \times \frac{(\text{H1} + \text{H2})}{2} \times \frac{1}{2,000}$$

Where:

$\text{ER}_{\text{NO}_x}$  = The average actual  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

- (3) If the result of (b)2iii(1) above is greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times \left( \text{H}_{\text{Allowable}} - \frac{(\text{H1} + \text{H2})}{2} \right) \times \frac{1}{2,000}$$

Where:

$\text{ER}_{\text{NO}_x}$  = The average actual  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;

$\text{H}_{\text{Allowable}}$  = The maximum allowable heat input of the source for the control period which is based on the lesser of the maximum heat input capacity and any limit on the heat input during the control period as established by any law, rule or permit;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

*\*[(AGENCY NOTE: The Department is considering two alternative methods for providing allowances to meet Incentive Claims, and is seeking comment on which of these two methods should be adopted. These two alternatives are set out at (c)3ii below. If the second alternative is selected, all references throughout the rule to an Incentive Reserve, including Step 3 proposed below, would be omitted upon adoption. After taking into consideration the comments received on the two alternatives during the public comment period, the Department intends to adopt one of these two alternatives.)]\**

3. **\*(Reserved.)\*\***[Step 3: This step determines the number of allowances which are to be allocated from the New Jersey emission budget to the Incentive Reserve. The purpose of this reserve is to hold aside a pool of allowances so that, after the control period, they are available for distribution to persons who demonstrate that they have saved or generated electricity during the control period by implementing certain environmentally beneficial techniques. The number of allowances to be allocated from the New Jersey emission budget into this reserve in this step is based on the operation of those sources having an average actual NO<sub>x</sub> emission rate, (ER<sub>NO<sub>x</sub></sub>) calculated in (b)2i above, not greater than 0.15 pounds of NO<sub>x</sub> per MMBtu. The number of allowances to be allocated from the New Jersey emission budget into this reserve in this step is calculated in accordance with the following procedure for each budget source that is not a new budget source:

- i. If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (b)2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to this reserve with respect to the source; and
- ii. If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (b)2i above is not greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then the number of allowances to be allocated to the Incentive Reserve is determined in accordance with the following:

- (1) Calculate the weighted allowable emission rate (ER<sub>Allowable</sub>), expressed in pounds per MMBtu, using the following equation:

$$ER_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{\sum_{i=1}^n (H1_i + H2_i)}$$

Where:

- n = The number of types of fuel burned during the two control periods out of the last three which had the greatest heat input;
- AER<sub>i</sub> = The lowest allowable emission rate, expressed in pounds per MMBtu, for the source for each type of fuel burned during the two control periods out of the last three which had the greatest heat input;

$H1_i =$  The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and

$H2_i =$  The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

- (2) If the weighted allowable emission rate ( $ER_{\text{Allowable}}$ ) as calculated in (b)3ii(1) above is less than 0.15 pounds of  $\text{NO}_x$  per MMBtu, then the number of allowances to be allocated to reserve is determined in accordance with the following equation:

$$\text{Allowances} = \frac{(ER_{\text{Allowable}} - ER_{\text{NO}_x})}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

$ER_{\text{NO}_x} =$  The average  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;

$ER_{\text{Allowable}} =$  The weighted allowable emission rate, expressed in pounds per MMBtu, as calculated in (b)3ii(1) above;

$H1 =$  The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

$H2 =$  The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

- (3) If the weighted allowable emission rate ( $ER_{\text{Allowable}}$ ) as calculated in (b)3ii(1) above is not less than 0.15 pounds per MMBtu, then the number of allowances to be allocated to the reserve is determined in accordance with the following equation:

$$\text{Allowances} = \frac{(0.15 - ER_{\text{NO}_x})}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

$ER_{NO_x}$  = The average  $NO_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;  
 0.15 = The lesser of the allowable emission rate and 0.15 pounds per MMBtu, which is the maximum rate at which allowances are allocated in this step;  
 H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;  
 H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and  
 2,000 = The factor for converting pounds into tons;]\*

4. Step \*[4]\* \*3\*: This step is a preliminary determination of the number of allowances which are to be allocated in (b)5 (Step \*[5]\* \*4\*) below to each budget source that is not a new budget source. For this step, the Department shall use the following procedure:

- i. If the average  $NO_x$  emission rate ( $ER_{NO_x}$ ) of the source as calculated in (b)2i above is greater than 0.15 pounds of  $NO_x$  per MMBtu, then the number of allowances determined in this step is calculated in accordance with the following equation:

$$\text{Allowances} = \frac{0.15}{2,000} \times \left( \frac{H1 + H2}{2} \right)$$

Where:

0.15 = The allocation rate, expressed in pounds per MMBtu, which is the maximum rate to be used for the allocation of allowances in this step;  
 H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;  
 H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and  
 2,000 = The factor for converting pounds into tons;

- ii. If the average  $NO_x$  emission rate ( $ER_{NO_x}$ ) of the source as calculated in (b)2i above is not greater than 0.15 pounds of  $NO_x$  per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the following procedure:

- (1) If the weighted allowable emission rate  $[(ER_{\text{Allowable}})]$  as calculated in  $[(b)3ii(1) \text{ above}]$  **\*equation 1 below\*** is less than 0.15 pounds of  $\text{NO}_x$  per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the  $[(\text{following})]$  equation **\*2 below\***:

$$ER_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{\sum_{i=1}^n (H1_i + H2_i)} \quad \textbf{*Equation 1*}$$

**\*Where:**

**n =** **The number of types of fuel burned during the two control periods out of the last three which had the greatest heat input;**

**AER<sub>i</sub> =** **The lowest allowable emission rate, expressed in pounds per MMBtu, for the source for each type of fuel burned during the two control periods out of the last three which had the greatest heat input;**

**H1<sub>i</sub> =** **The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and**

**H2<sub>i</sub> =** **The heat input, expressed in MMBtu, for each type of fuel burned during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;\***

$$\text{Allowances} = \frac{(ER_{\text{NO}_x} + ER_{\text{Allowable}})}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000} \quad \textbf{*Equation 2*}$$

**Where:**

**ER<sub>NO<sub>x</sub></sub> =** The average  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;

**ER<sub>Allowable</sub> =** The weighted allowable emission rate, expressed in pounds per MMBtu, as calculated in  $[(b)3ii(1)]$  **\*equation 1\*** above;

**H1 =** The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the



- control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;
- (2) If the weighted allowable emission rate  $[(ER_{\text{Allowable}})]$  as calculated in  $[(b)3ii(1)]$  **\*equation 1 of (1)\*** above is not less than 0.15 pounds per MMBtu, then the preliminary determination of the number of allowances to be allocated to the source is calculated in accordance with the following equation:

$$\text{Allowances} = \frac{(ER_{\text{NO}_x} + 0.15)}{2} \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

- $ER_{\text{NO}_x}$  = The average  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (b)2i above;
- 0.15 =  $[(\text{The lesser of the allowable emission rate and})]$  0.15 pounds per MMBtu, which is the maximum rate at which allowances are allocated in this step;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

5. Step  $[(5)]$  **\*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 Reserve in (b)1 (Step 1) above;
  - (2) The number of allowances allocated to the Growth Reserve in (b)2 (Step 2) above;

\*[(3) The number of allowances allocated to the Incentive Reserve in (b)3 (Step 3) above;]\*

\*[(4)]\* \*(3)\* The number of allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h); and

\*[(5)]\* \*(4)\* The number of allowances preliminarily determined in (b)4 (Step \*[(4)]\* \*(3)\*) above to be allocated to each budget source that is not a new budget source;

ii. If the sum in (b)5i above is less than or equal to 17,340, then the Department shall allocate allowances as follows:

- (1) Allowances shall be allocated to each budget source that is not a new budget source, as preliminarily determined in (b)4 (Step \*[(4)]\* \*(3)\*) above; and
- (2) The remaining allowances shall be allocated to companies which operated budget sources in 1990. These companies are listed in Table 1 below. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$\text{Allowances} = \frac{C_{\%}}{100} \times A_R$$

Where:

$C_{\%}$  = The percent that activity of a given company contributes to the 17,054 allowances of the emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1 below; and

$A_R$  = The remaining number of allowances, which have not been allocated in (b)1 through 3 (Steps 1 through 3) and (b)5ii(1) above.

TABLE 1

COMPANY	*[Contribution to 1999 - 2002 NJ's Base Budget]*	PERCENT OF TOTAL
ATLANTIC ELECTRIC	*[2,717]*	15.93175%
CHEVRON PRODUCTS COMPANY	*[21]*	0.12314%
CIBA GEIGY	*[23]*	0.13487%
COASTAL CORPORATION	*[404]*	2.36895%
COGEN TECHNOLOGIES ENERGY GROUP	*[67]*	0.39287%
GENERAL PUBLIC UTILITIES CORPORATION	*[948]*	5.55881%
MILFORD POWER, LIMITED PARTNERSHIP	*[55]*	0.32250%
MOBIL OIL CORPORATION	*[336]*	1.97021%
PRIME ENERGY	*[227]*	1.33107%
PUBLIC SERVICE ELECTRIC AND GAS COMPANY	*[11,506]*	67.46804%
ROCHE VITAMINS INCORPORATED	*[398]*	2.33376%
TOSCO REFINERY	*[297]*	1.74153%
CITY OF VINELAND ELECTRIC UTILITY	*[55]*	0.32250%
TOTAL	*[17,054]*	100.00000%

\*[ NOTE: The total in this table represents the application of the emission reductions called for by the OTC MOU on the 1990 budget sources and does not include the 286 allowances assigned to New Jersey, which are the allowances attributed to New Jersey's portion of the baseline "10,000 ton reserve." ]\*

- iii. If the sum determined in (b)5i above is greater than 17,340, then the Department shall allocate the remaining allowances to budget sources in proportion to the

amount of preliminarily determined in (b)4 (Step \*[4]\* \*3\*) above. The proportional share to be allocated to each shall be determined as follows:

$$\text{Allowances} = \frac{17,340 - A0 - A1 - A2 \quad [- A3]}{PA_{\text{Total}}} \times PA$$

Where:

- A0 = The total number of allowances that have been previously allocated pursuant to (c)3ii or (i) below, or pursuant to N.J.A.C. 7:27-31.17(h);
- A1 = The total number of allowances allocated to the New Source Reserve in (b)1 (Step 1) above;
- A2 = The total number of allowances allocated to the Growth Reserve in (b)2 (Step 2) above;
- \*[A3 = The total number of allowances allocated to the Incentive Reserve in (b)3 (Step 3) above;]\*
- PA = The number of allowances preliminarily determined for allocation to the source as determined in (b)4 (Step \*[4]\* \*3\*) above; and
- PA<sub>Total</sub> = The sum of all allowances preliminarily determined for allocation to all budget sources in (b)4 (Step \*[4]\* \*3\*) above.

(c) For the years 1999, 2000, 2001, and 2002, after each control period, the Department shall allocate allowances from the New Source Reserve, the Growth Reserve, and \*[the]\* Incentive \*[Reserve]\* \*Allowances\* as follows:

1. The Department shall allocate the allowances in the New Source Reserve by \*[December 15]\* \*November 30\* of the current year as follows:
  - i. For any new budget source, the Department shall allocate allowances equal to the number of tons of NO<sub>x</sub> emitted by the source during the control period, \*[provided that]\* \*unless\* the emissions \*[do not]\* exceed \*the lesser of 0.15#/MMBtu or\* \*[any applicable maximum]\* \*the lowest\* allowable emissions limit \*during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO<sub>x</sub> emission and the emissions at the lesser of the allowable emission rate or 0.15#/MMBtu during the period in which the source exceeded this condition within the control period\*; and
  - ii. If there are allowances remaining in the New Source Reserve after the allocation of allowances in accordance with (c)1i above, the Department shall allocate these allowances to companies which operated budget sources in 1990. These companies are listed in Table 1 above. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$\text{Allowances} = \frac{C_{\%}}{100} \times A_R$$

Where:

$C_{\%}$  = The percent that activity of a given company contributes to the 17,054 allowances of the base emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1 above; and

$A_R$  = The remaining number of allowances in the New Source Reserve, which have not been allocated in (c)1i above;

2. The Department shall allocate allowances in the Growth Reserve by \*[December 15]\* **\*November 30\*** of the current year as follows:

- i. For each budget source that is not a new budget source and that operated at an average actual emission rate of 0.15 pounds of  $\text{NO}_x$  per MMBtu or less during the control period, the Department shall allocate allowances according to the following procedure:

- (1) Calculate the average actual emission rate for the control period of the current year ( $\text{ER}_{\text{Actual}}$ ) in accordance with the following equation:

$$\text{ER}_{\text{Actual}} = \frac{\text{EA}}{\text{HA}}$$

Where:

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

HA = Actual heat input during the control period, expressed in MMBtu;

- (2) If the average actual emission rate ( $\text{ER}_{\text{Actual}}$ ) for the budget source as calculated in accordance with (c)2i(1) above is greater than 0.15 pounds per MMBtu or if the actual emissions during the control period is less than the number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above, then the Department shall allocate no allowances from the Growth Reserve to the budget source;
- (3) Except as provided in (c)2iii below, if the average actual emission rate ( $\text{ER}_{\text{Actual}}$ ) for the budget source as calculated in accordance with (c)2i(1) above is not greater than 0.15 pounds per MMBtu and if the actual emissions during the control period is greater than the number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above, then the

Department shall allocate allowances from the Growth Reserve to the budget source in accordance with the following equation:

$$\text{Allowances} = E_{\text{Actual}} - A$$

Where:

- $E_{\text{Actual}}$  = The total NO<sub>x</sub> emissions, expressed in tons, of the source during the control period, minus any emissions due to the exceedance of an applicable maximum allowable emissions limit; and
- $A$  = The number of allowances allocated to the source pursuant to (b)5ii(1) or (b)5iii above;

- ii. If there are allowances remaining in the Growth Reserve after the allocation of allowances in accordance with (c)2i above, the Department shall allocate these allowances to companies which operated budget sources in 1990. These companies are listed in Table 1 above. The number of allowances to be allocated to a given company shall be determined in accordance with the following equation:

$$\text{Allowances} = \frac{C_{\%}}{100} \times A_R$$

Where:

- $C_{\%}$  = The percent that activity of a given company contributes to the 17,054 allowances of the base emission budget for New Jersey for the years 1999 through 2002 as listed in Table 1 above; and
- $A_R$  = The remaining number of allowances in the Growth Reserve which have not been allocated in (c)2i above;

- iii. If there are not enough allowances in the Growth Reserve to allocate allowances to all of the eligible sources accordance with (c)2i above, then the Department shall prorate the allocations to each source according to the amount of allowances each source would have otherwise received in accordance with the following equation:

$$\text{Allowances} = \frac{A_{\text{Source}}}{A_{\text{Total}}} \times A_{\text{Reserve}}$$

Where:

- $A_{\text{Source}}$  = The number of allowances as determined in (c)2i above for each source;
- $A_{\text{Total}}$  = The total number of allowances as determined in (c)2i above for all of the eligible sources; and
- $A_{\text{Reserve}}$  = The number of allowances in the Growth Reserve;

3. The Department shall allocate allowances for the implementation of environmentally beneficial techniques which save or generate energy as follows:

- i. The Department shall allocate allowances to meet claims which were submitted to the Department by October 15 of the current year and which have been approved by the Department pursuant to N.J.A.C. 7:27-31.8 in accordance with the following equation:

$$\text{Allowances} = \frac{1.50}{2,000} \times E$$

Where:

1.50 = The rate, expressed in pounds per MW-hr, at which allowances are allocated for the implementation of environmentally beneficial techniques that result in the saving or generation of electricity;

E = The amount of saved or generated electricity, expressed in MW-hr, in the approved claim pursuant to N.J.A.C. 7:27-31.8; and

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

*\*[(AGENCY NOTE: The Department is considering two alternative methods for providing allowances to meet Incentive Claims, and is seeking comment on which of these two methods should be adopted. These two alternatives are set out for (c)3ii below. If the second alternative is selected, all references throughout the rule to an Incentive Reserve would be omitted upon adoption. After taking into consideration the comments received on the two alternatives during the public comment period, the Department intends to adopt one of these two alternatives.)*

**ALTERNATIVE 1**

- ii. The allowances shall be allocated from the Incentive Reserve pursuant to (c)3i above until all claims have been met or until the reserve is exhausted. Thereafter, the Department shall allocate allowances from the next year's base emission budget for New Jersey until all claims are met. If, in any year, all claims have been met before the reserve is exhausted, then the remaining allowances shall remain in the Incentive Reserve and shall be available for allocation in the next year or in a subsequent year.

**ALTERNATIVE 2 ]\***

- ii. The Department shall allocate allowances from the next year's base emission budget for New Jersey until all claims are met.

- (d) Prior to the control period in the year 2003 and in each year thereafter, the Department shall transfer 4,822 allowances from the base emission budget for New Jersey into \*[a discretionary general]\* **\*the attainment reserve\*** account held by the Department, leaving 8,200 of 13,022 allowances of the base budget for New Jersey to be allocated. The Department shall allocate 8,200 allowances minus any allowances that have been previously allocated pursuant to (c)3ii above, (e)3ii below, (i) below or pursuant to N.J.A.C. 7:27-31.17(h). This subsection does not

apply to opt-in sources; opt-in sources are addressed separately in subsection (f) below. The Department shall allocate allowances in accordance with the following steps:

1. Step 1: This step determines the number of allowances which are to be allocated to the New Source Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to new budget sources which have not operated for two full May 1 through September 30 periods. The number of allowances to be allocated to this reserve in this step is based on each new budget source's allowable emissions for the control period. For each new budget source, the Department shall allocate allowances from the New Jersey emission budget into the New Source Reserve in accordance with the following equation:

$$\text{Allowances} = \frac{\text{Allowable Emission Rate} \times \text{Allowable Activity}}{2,000}$$

Where:

Allowable Emission Rate = The allowable emission rate, expressed in pounds per unit of activity. If more than one fuel is allowed to be used, the allowable emission rate shall be the weighted average of the allowable emission rates for each fuel type **\*; the weighting of this average shall be based on the maximum allowable consumption of the fuel associated with the highest allowable NOx emission rate. If the allowable emission rate for a given fuel is greater than 0.15#/MMBtu, then 0.15#/MMBtu shall be used as the allowable emission rate for the purpose of this equation. If the allowable emission rate for a given fuel for an industrial boiler or process heater is greater than 0.20#/MMBtu, then 0.20#/MMBtu shall be used as the allowable emission rate for the purpose of this equation\***;

Allowable Activity = The maximum allowable activity of the source for the control period which is based on the lesser of the maximum capacity and any limit on the activity during the control period as established by any law, rule or permit; and

2,000 = The factor converting pounds into tons;

2. Step 2: This step determines the number of allowances which are to be allocated to the Growth Reserve. The purpose of this reserve is to hold aside a pool of allowances, so that they are available for distribution after the control period to certain budget sources to accommodate an increase in fuel use. The number of allowances to be allocated to this reserve in this step is based on up to a 50 percent increase in the average heat input of budget sources having emission rates not greater than 0.15 pounds per MMBtu. The number of allowances to be allocated to the reserve is calculated in accordance with the following procedure for each budget source that is not a new budget source:



- i. Calculate the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source, expressed in pounds per MMBtu, in accordance with the following equation:

$$ER_{NO_x} = \frac{E1 + E2}{H1 + H2}$$

Where:

- E1 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- E2 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

- ii. If the source is an industrial boiler **\*or a process heater\***, the number of allowances to be allocated to the Growth Reserve is determined in accordance with the following procedure:

- (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to that source; and
- (2) If the NO<sub>x</sub> emission rate as calculated in (d)2i above is not greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with (d)2iv below;

- iii. If the source is utilized for the purpose of electric or steam generation or both and is not an industrial boiler **\*nor a process heater\***, the number of allowances to be allocated to the Growth Reserve is determined in accordance with the following procedure:

- (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to the Growth Reserve with respect to that source;

- (2) If the average NO<sub>x</sub> emission rate (ER<sub>NOx</sub>) of the source as calculated in (d)2i above is not greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then allowances shall be allocated to the Growth Reserve in accordance with (d)2iv below;
- iv. The number of allowances to be allocated to the Growth Reserve pursuant to ii(2) and iii(2) above shall be calculated in accordance with the following procedure:
  - (1) Calculate 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input in accordance with the following equation:

$$H_{150\%} = 1.5 \times \left( \frac{H1 + H2}{2} \right)$$

Where:

H<sub>150%</sub> = 150 percent of the average actual heat input of the two control periods, out of the last three years, which had the highest heat input;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input; and

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input;

- (2) If H<sub>150%</sub>, as determined in (d)2iv(1) above, is not greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NOx}} \times 0.5 \times \frac{(H1 + H2)}{2} \times \frac{1}{2,000}$$

Where:

ER<sub>NOx</sub> = The average actual NO<sub>x</sub> emission rate, expressed in pounds per MMBtu, as calculated in [(d)1i] \*(d)2i\* above;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control

period during which the source had the second greatest actual heat input; and

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

- (3) If the result of (d)2iv(1) above is greater than the maximum allowable heat input of the source during the control period, then number of allowances to be allocated to the reserve is calculated in accordance with the following equation:

$$\text{Allowances} = \text{ER}_{\text{NO}_x} \times \left( \text{H}_{\text{Allowable}} - \frac{(\text{H1} + \text{H2})}{2} \right) \times \frac{1}{2,000}$$

Where:

$\text{ER}_{\text{NO}_x}$  = The average actual  $\text{NO}_x$  emission rate, expressed in pounds per MMBtu, as calculated in (d)1i above;

$\text{H}_{\text{Allowable}}$  = The maximum allowable heat input of the source for the control period which is based on the lesser of the maximum heat input capacity and any limit on the heat input during the control period as established by any law, rule or permit;

H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

*\*[(AGENCY NOTE: The Department is considering two alternative methods for providing allowances to meet Incentive Claims, and is seeking comment on which of these two methods should be adopted. These two alternatives are set out at (e)3ii below. If the second alternative is selected, all references throughout the rule to an Incentive Reserve, including Step 3 proposed below, would be omitted upon adoption. After taking into consideration the comments received on the two alternatives during the public comment period, the Department intends to adopt one of these two alternatives.)]\**

3. **\*(Reserved.)\*\***[Step 3: This step determines the number of allowances which are to be allocated from the New Jersey emission budget to the Incentive Reserve. The purpose of this reserve is to hold aside a pool of allowances so that, after the control period, they are available for distribution to persons who demonstrate that they have saved or generated electricity during the control period by implementing certain environmentally beneficial techniques. The number of allowances to be allocated from the New Jersey emission budget into this reserve in this step is based on the operation of those budget sources having an average actual  $\text{NO}_x$  emission rate, ( $\text{ER}_{\text{NO}_x}$ ) calculated in (d)2i above, not greater than 0.15 pounds of  $\text{NO}_x$  per MMBtu. The number of allowances to be allocated from the New Jersey emission budget into this reserve in this step is calculated

in accordance with the following procedure for each budget source that is not a new budget source:

- i. If the source is an industrial boiler, the number of allowances to be allocated to the Incentive Reserve is determined in accordance with the following procedure:
  - (1) If the average NO<sub>x</sub> emission rate (ER<sub>NOx</sub>) of the source as calculated in (d)2i above is greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to the Incentive Reserve.
  - (2) If the NO<sub>x</sub> emission rate as calculated in (d)2i above is not greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then the preliminary number of allowances for the source is determined in this step in accordance with the following three equations:

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \text{Equation 1}$$

Where:

$E_{\text{Allowable}}$  = The average allowable emissions for the source;

$n$  = The number of type of fuel burned during the two greatest heat input control periods during the last three years;

$AER_i$  = The lesser of 0.20 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for each type of fuel burned during the two greatest heat input control periods;

$H1_i$  = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

$H2_i$  = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \text{Equation 2}$$

Where:

$E_{\text{Actual}}$  = The average allowable emissions for the source;

- E1 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- E2 = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

$$\text{Allowances} = \frac{E_{\text{Allowable}} - E_{\text{Actual}}}{2} \quad \text{Equation 3}$$

Where:

- E<sub>Allowable</sub> = The average allowable emissions for the source as determined in Equation 1 above; and
- E<sub>Actual</sub> = The average allowable emissions for the source as determined in Equation 2 above;

- ii. If the source is utilized for the purpose of electric or steam generation or both and is not an industrial boiler, the number of allowances to be allocated to the Incentive Reserve is determined in accordance with the following procedure:

- (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then no allowances shall be allocated to the Incentive Reserve with respect to the source; and
- (2) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then the preliminary number of allowances for the source is determined in this step in accordance with the following equations:

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \text{Equation 1}$$

Where:

- E<sub>Allowable</sub> = The average allowable emissions for the source;
- n = The number of type of fuel burned during the two greatest heat input control periods during the last three years;
- AER<sub>i</sub> = The lesser of 0.15 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for

each type of fuel burned during the two greatest heat input control periods;

- $H1_i$  = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- $H2_i$  = The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \text{Equation 2}$$

Where:

- $E_{\text{Actual}}$  = The average actual emissions for the source;
- $E1$  = The total actual  $\text{NO}_x$  emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- $E2$  = The total actual  $\text{NO}_x$  emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons; and

$$\text{Allowances} = \frac{E_{\text{Allowable}} - E_{\text{Actual}}}{2} \quad \text{Equation 3}$$

Where:

- $E_{\text{Allowable}}$  = The average allowable emissions for the source as determined in Equation 1 above; and
- $E_{\text{Actual}}$  = The average allowable emissions for the source as determined in Equation 2 above;]\*

4. Step \*[4]\* \*3\*: This step is a preliminary determination of the number of allowances which are to be allocated in (d)5 (Step \*[5]\* \*4\*) below to each budget source that is not a new budget source. In this step, the Department shall preliminarily determine the

number of allowances to be allocated to each budget source that is not a new budget source, in accordance with the following procedure:

- i. If the source is an industrial boiler **\*or a process heater\***, the number of allowances to be allocated to the source is preliminarily determined in this step in accordance with the following procedure:
  - (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following equation:

$$\text{Allowances} = \frac{0.20}{2,000} \times \left( \frac{H1 + H2}{2} \right)$$

Where:

- 0.20 = The allocation rate, expressed in pounds per MMBtu;
- H1 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;
- H2 = The heat input, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and
- 2,000 = The factor for converting pounds into tons;

- (2) If the average NO<sub>x</sub> emission rate as calculated in (d)2i above is not greater than 0.20 pounds of NO<sub>x</sub> per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following **\*[equation]\* \*equations\***:

$$\text{Preliminary Allowances} = \frac{E_{\text{Allowable}} + E_{\text{Actual}}}{2} \quad \textbf{*Equation 1*}$$

Where:

- E<sub>Allowable</sub> = The average allowable emissions for the source, as determined in **\*[(d)3i(2) above]\* \*equation 2 below\***; and
- E<sub>Actual</sub> = The average actual emissions for the source, as determined in **\*[(d)3i(2) above]\* \*equation 3 below\***;

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \text{*Equation 2*}$$

**\*Where:**

**n =** The number of type of fuel burned during the two greatest heat input control periods during the last three years;

**AER<sub>i</sub> =** The lesser of 0.20 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for each type of fuel burned during the two greatest heat input control periods;

**H1<sub>i</sub> =** The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

**H2<sub>i</sub> =** The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \text{*Equation 3*}$$

**\*Where:**

**E1 =** The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

**E2 =** The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

- ii. If the source is utilized for the purpose of electric generation alone or for the purpose of generation of a combination electricity and useful heat, the number of allowances to be allocated to the source is preliminarily determined in accordance with the following procedure:



- (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in 2i above is greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then the number of allowances for the source is preliminarily determined in accordance with the following equation:

$$\text{Allowances} = \frac{1.50 \times \left( \frac{\text{OE1} + \text{OE2}}{2} \right) + 0.44 \times \left( \frac{\text{OS1} + \text{OS2}}{2} \right)}{2,000}$$

Where:

- 1.50 = The allocation rate, expressed in pounds per MW-hr;  
 OE1 = The net electric output, expressed in MW-hr, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual net electric output;  
 OE2 = The net electric output, expressed in MW-hr, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual net electric output;  
 0.44 = The allocation rate, expressed in pounds per MMBtu output, which is approximately equivalent to the allocation rate of 1.50 pounds per MW-hr;  
 OS1 = 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 source had the greatest actual net electric output;  
 OS2 = 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 source had the second greatest actual net electric output; and  
 2,000 = The factor for converting pounds into tons; and

- (2) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the source as calculated in (d)2i above is **\*not\*** greater than 0.15 pounds of NO<sub>x</sub> per MMBtu, then the number of allowances to be allocated to the source is preliminarily determined in accordance with the following **\*[equation]\* \*equations\***:

$$\text{Allowances} = \frac{E_{\text{Allowable}} + E_{\text{Actual}}}{2} \quad \textbf{*Equation 1*}$$

Where:

- E<sub>Allowable</sub> = The average allowable emissions for the source, as determined in **\*[(d)4ii(2) above]\* \*equation 2 below if the allowable emission rate is expressed on a heat input basis or in a similar manner**

**if the allowable emission rate is expressed on an output basis\***;  
and

$E_{\text{Actual}} =$  The average actual emissions for the source, as determined in  
\*[(d)4ii(2) above]\* **\*equation 3 below\***; and

$$E_{\text{Allowable}} = \frac{\sum_{i=1}^n (AER_i \times (H1_i + H2_i))}{2} \times \frac{1}{2,000} \quad \textbf{*Equation 2*}$$

**\*Where:**

**n =** The number of type of fuel burned during the two greatest heat input control periods during the last three years;

**AER<sub>i</sub> =** The lesser of 0.15 pounds per MMBtu or the lowest allowable emission rate expressed in pounds per MMBtu for the source for each type of fuel burned during the two greatest heat input control periods;

**H1<sub>i</sub> =** The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

**H2<sub>i</sub> =** The heat input, expressed in MMBtu, for each type of fuel during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000} \quad \textbf{*Equation 3*}$$

**\*Where:**

**E1 =** The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the greatest actual heat input;

**E2 =** The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the source had the second greatest actual heat input; and

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

5. Step \*[5]\* **\*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 Reserve in (d)1 (Step 1) above;
  - (2) The number of allowances allocated to the Growth Reserve in (d)2 (Step 2) above;
  - \*(3) The number of allowances allocated to the Incentive Reserve in d(3) (Step 3) above; and]\*
  - \*[(4)]\* \*(3)\* The number of allowances that have been previously allocated pursuant to (c)3ii above (e)3ii below, (i) below, or pursuant to N.J.A.C. 7:27-31.17(h); and
  - \*[(5)]\* \*(4)\* The number of allowances preliminarily determined in (d)4 (Step \*[4]\* \*(3)\*) above to be allocated to each budget source that is not a new budget source;
- ii. If the sum in (d)5i above is less than or equal to 8,200, then the Department shall allocate allowances as follows:
  - (1) Allowances shall be allocated to each budget source that is not a new budget source, as preliminarily determined in (d)4 (Step \*[4]\* \*(3)\*) above; and
  - (2) Any remaining allowances that were not allocated in (d)1 (Step 1), (d)2 (Step 2), \*[(d)3 (Step 3)]\*, or (d)5ii(1) above shall be allocated to the Department's \*[discretionary]\* \*attainment reserve\* account; or
- iii. If the sum determined in (d)5i above is greater than 8,200, then the Department shall allocate the remaining allowances to budget sources in proportion to the amount of preliminarily determined in (d)4 (Step \*[4]\* \*(3)\*) above. The proportional share to be allocated to each shall be determined as follows:

$$\text{Allowances} = \frac{8,200 - A0 - A1 - A2 \quad [- A3]}{PA_{\text{Total}}} \times PA$$

Where:

- A0 = The total number of allowances that have been previously allocated pursuant to (c)3ii above, (e)3ii below, (i) below or pursuant to N.J.A.C. 7:27-31.17(h)
- A1 = The total number of allowances allocated to the New Source Reserve in (d)1 (Step 1) above;
- A2 = The total number of allowances allocated to the Growth Reserve in (d)2 (Step 2) above;

\*[A3 = The total number of allowances allocated to the Incentive Reserve in (d)3 (Step 3) above;]\*

PA = The number of allowances preliminarily determined for allocation to the source as determined in (d)4 (Step \*[4]\* **\*3\***) above; and

PA<sub>Total</sub> = The sum of all allowances preliminarily determined for allocation to all budget sources in (d)4 (Step \*[4]\* **\*3\***) above.

(e) After the control period of the year 2003 and of each year thereafter, the Department shall allocate allowances from the New Source Reserve, the Growth Reserve, and \*[the]\* Incentive \*[Reserve]\* **\*Allowances\*** as follows:

1. The Department shall allocate the allowances in the New Source Reserve by \*[December 15]\* **\*November 30\*** of the current year as follows:

i. For any new budget source, the Department shall allocate allowances equal to the number of tons of NO<sub>x</sub> emitted by the source during the control period, \*[provided that]\* **\*unless\*** the emissions \*[do not]\* exceed \*[any applicable maximum allowable emissions limit]\* **\*:\***

**\*(1) For an industrial boiler or process heater, the lesser of 0.20#/MMBtu or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO<sub>x</sub> emission and the emissions at the lesser of the allowable emission rate or 0.20#/MMBtu during the period in which the source exceeded this condition within the control period; or\***

**\*(2) For a source that is not an industrial boiler nor a process heater, the lesser of 0.15#/MMBtu or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the source will be reduced by difference between the actual NO<sub>x</sub> emission and the emissions at the lesser of the allowable emission rate or 0.15#/MMBtu during the period in which the source exceeded this condition within the control period\*; and**

ii. If there are allowances left in the New Source Reserve after distributing the allowances in accordance with (e)1i above, then the Department shall allocate such allowances in accordance with (e)4 below;

2. The Department shall allocate the allowances in the Growth Reserve by \*[December 15]\* **\*November 30\*** of the current year as follows:

i. The only sources that are eligible to be allocated allowances from the Growth Reserve in this subparagraph are industrial boilers **\*or process heaters\*** that emitted NO<sub>x</sub> at a rate less than or equal to 0.20 pounds per MMBtu heat input and other budget sources that emitted NO<sub>x</sub> at a rate less than or equal to 0.15 pounds per MMBtu heat input. For each budget source that is not a new budget source,

the Department shall allocate allowances in accordance with the following procedure:

- (1) Calculate the average actual emission rate of the source for the control period of the current year ( $ER_{Actual}$ ) in accordance with the following equation:

$$ER_{Actual} = \frac{EA}{HA}$$

Where:

EA = Actual emissions during the control period, expressed in pounds of  $NO_x$ ; and

HA = Actual heat input during the control period, expressed in MMBtu;

- (2) If the average actual emission rate ( $ER_{Actual}$ ) for the budget source as calculated in accordance with (e)2i(1) above is greater than 0.20 pounds per MMBtu for industrial boilers **\*or process heaters\*** or 0.15 pounds per MMBtu for any other budget source, then the Department shall allocate no allowances from the Growth Reserve to the budget source;
- (3) Except as provided in (e)2iii below, if the average actual emission rate ( $ER_{Actual}$ ) for the budget source as calculated in accordance with (e)2i(1) above is not greater than 0.20 pounds per MMBtu for industrial boilers**\*or process heaters\*** or 0.15 pounds per MMBtu for any other budget source, and if the actual emissions during the control period is greater than the number of allowances allocated to the source pursuant to (d)5ii(1) or (d)5iii above, then the Department shall allocate allowances from the Growth Reserve to the budget source in accordance with the following equation:

$$\text{Allowances} = E_{Actual} - A$$

Where:

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

A = The number of allowances allocated to the source pursuant to (d)5ii(1) or (d)5iii above;

- ii. If there are allowances left in the Growth Reserve after distributing the allowances in accordance with (e)2i above, then the Department shall allocate such allowances in accordance with (e)4 below;

- iii. If there are not enough allowances in the Growth Reserve to allocate allowances to all of the eligible sources accordance with (e)2i above, then the Department shall prorate the allocations to each source according to the amount of allowances each source would have otherwise received in accordance with the following equation:

$$\text{Allowances} = \frac{A_{\text{Source}}}{A_{\text{Total}}} \times A_{\text{Reserve}}$$

Where:

- $A_{\text{Source}}$  = The number of allowances as determined in (e)2i above for each source;  
 $A_{\text{Total}}$  = The total number of allowances as determined in (e)2i above for all of the eligible sources; and  
 $A_{\text{Reserve}}$  = The number of allowances in the Growth Reserve;

3. The Department shall allocate allowances for the implementation of environmentally beneficial techniques which save or generate energy as follows:
  - i. The Department shall allocate allowances to meet claims which were submitted to the Department by October 15 of the current year and which have been approved by the Department pursuant to N.J.A.C. 7:27-31.8 in accordance with the following equation:

$$\text{Allowances} = \frac{1.50}{2,000} \times E$$

Where:

- 1.50 = The rate, expressed in pounds per MW-hr, at which allowances are allocated for the implementation of environmentally beneficial techniques that result in the saving or generation of electricity;  
 $E$  = The amount of saved or generated electricity, expressed in MW-hr, in the approved claim pursuant to N.J.A.C. 7:27-31.8; and  
 2,000 = The factor for converting pounds into tons;

*\*[(AGENCY NOTE: The Department is considering two alternative methods for providing allowances to meet Incentive Claims, and is seeking comment on which of these two methods should be adopted. These two alternatives are set out for (e)3ii below. If the second alternative is selected, all references throughout the rule to an Incentive Reserve would be omitted upon adoption. After taking into consideration the comments received on the two alternatives during the public comment period, the Department intends to adopt one of these two alternatives.)*

**ALTERNATIVE 1**

- ii. The allowances shall be allocated from the Incentive Reserve pursuant to (e)3i above until all claims have been met or until the reserve is exhausted. Thereafter, the Department shall allocate allowances from the next year's base emission budget

for New Jersey until all claims are met. If, in any year, all claims have been met before the reserve is exhausted, then the remaining allowances shall remain in the Incentive Reserve and shall be available for allocation in the next year or in a subsequent year.

*ALTERNATIVE 2]\**

- ii. The Department shall allocate allowances from the next year's base emission budget for New Jersey until all claims are met.
4. If there are any allowances remaining in the New Source Reserve or Growth Reserve, after allowances are allocated in accordance with (e)1i and 2i above, the Department shall allocate the remaining allowances in accordance with the following procedure:
- i. The Department shall first compare the number of allowances that remain in the two reserves, with the difference between the following:
    - (1) The number of allowances preliminarily determined to be allocated in (d)4 above; and
    - (2) The number of allowances actually allocated to budget sources in (d)5 above;
  - ii. If, pursuant to (e)4i above, the number of allowances that remain in the two reserves is less than the difference, then the Department shall allocate all of the allowances remaining in the two reserves to each budget source in accordance with the following equation:

$$\text{Allowances} = \frac{A_R}{PA_{\text{Total}}} \times PA$$

Where:

- $A_R$  = The total number of allowances remaining in the two reserves;
- $PA$  = The number of allowances preliminarily determined for allocation to the source in (d)4 above; and
- $PA_{\text{Total}}$  = The total number of allowances preliminary determined for allocation to all budget sources in (d)4 above; and

- iii. If, pursuant to (e)4i above, the number of allowances that remain in the two reserves is equal to or greater than the difference, then the Department shall allocate the remaining allowances according to the following procedure:
  - (1) The Department shall allocate allowances to each budget source in accordance with the following equation:

$$\text{Allowances} = \frac{\text{PA}_{\text{Total}} - \text{A5}}{\text{PA}_{\text{Total}}} \times \text{PA}$$

Where:

A5 = The total number of allowances allocated to budget sources in (d)5 above;

PA = The number of allowances preliminarily determined for allocation to each source as determined in (d)4 above; and

PA<sub>Total</sub> = The total number of allowances preliminarily determined for allocation to all sources in (d)4 above; and

- (2) The Department shall transfer any allowances that still remain unallocated to the Department's \*[discretionary]\* **\*attainment reserve\*** account.
- (f) Each year, beginning in the year 1999, the Department shall allocate a number of allowances prior to the control period into the compliance account of each opt-in source equal to the amount of allowances added to the New Jersey emission budget to accommodate the opt-in source pursuant to N.J.A.C. 7:27-31.4, Opt-in provisions. However, if the productivity of the source is curtailed during the control period, then a number of allowances shall be deducted accordingly from the source's compliance account during the end-of-season reconciliation process and be permanently retired, pursuant to N.J.A.C. 7:27-31.17(g)3.
- (g) Before the control period of 1999, the Department shall allocate a quantity of allowances to the compliance account of each source equal to the amount of early reductions for which the Department has approved the creation of early reduction allowances pursuant to N.J.A.C. 7:31.12, Early Reductions.
- (h) In the computations at (b)5ii(2), (b)5iii, (c)1ii, (c)2ii, (c)2iii, (d)5iii, (e)2iii, (e)4ii, and (e)4iii(1), above to determine the number of whole allowances to be allocated or distributed, 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 or distributed under the provision equals the total number of allowances available.
- (i) The Department reserves the right, in any year, prior to carrying out the allocation process in (b) or (d) above, to allocate to another jurisdiction a limited number of current year allowances, not to exceed two percent of the base emission budget for the year. The Department shall exercise this right only if implementation of the OTC MOU result has the anomalous outcome of the other jurisdiction having insufficient allowances to meet the needs of even its low-emitting budget sources. In the year 2003 and thereafter, the Department shall take these allowances from its \*[discretionary]\* **\*attainment\*** reserve **\*account\***.



## 7:27-31.8 Claims for Incentive \*[Reserve]\* 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. 7:27-31.7(c)\*[1]\* **\*3 or (e)3\***, the Department shall distribute allowances each year to persons who have demonstrated, in accordance with the procedures of this section, that they have saved or generated electricity through the implementation of such techniques.
- (b) Distribution of allowances \*[from the Incentive Reserve]\* **\*pursuant to N.J.A.C. 7:27-31.7(c)3 or (e)3\*** shall be based on claims submitted by the persons who have saved or generated the electricity. No **\*such incentive\*** allowances shall be allocated \*[from the Incentive Reserve]\* for any claim that is not received by the Department by October \*[15]\* **\*30\*** of the year in which the electricity savings or generation occurred during the control period.

- (c) The following persons are eligible to submit a claim for incentive \*[reserve]\* allowances:

1. A New Jersey electric consumer who:

- i. Purchases its electricity from a company which owns a NO<sub>x</sub> Budget source located 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:

*\*[(AGENCY NOTE: The Department is seeking comment on which of the guidance documents proposed for (1) below should be used for quantifying electricity consumption savings. After taking into consideration the comments received during the public comment period, the Department intends to adopt one of these two alternatives.)*

**ALTERNATIVE 1 ]\***

- (1) Belongs to a class to which the following quantification guidance document applies: "Measurement Protocol for Commercial, Industrial and Residential Facilities," issued by New Jersey's Board of Regulatory Commissioners on April 28, 1993;

**\*[ALTERNATIVE 2**

- (1) Belongs to a class to which the following quantification guidance document applies: "International Performance Measurement and Verification Protocol for Accrediting Emission Reductions from Energy Efficiency" issued by the United States Department of Energy in March 1996;]\*
- (2) Does not result in the construction, installation, or operation of a new emission source or increase the emissions of any existing emission source at the facility;

- (3) Does not cause an increase in \*[HAP]\* emissions **\*of any HAP\***; and
  - (4) Does not cause an increase, which is greater than five tons per year, in the emission of any regulated air contaminant other than NO<sub>x</sub>; **\*[and]\***
2. The owner or operator of \*[a source]\* **\*equipment\*** that is not a budget source, which commenced operation in 1992 or thereafter and which 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 using solar energy or wind power **\*; and**
- 3. The owner or operator of equipment that generates electricity by another environmentally beneficial technique approved by the Department\* .**
- (d) A person eligible to receive an incentive allocation may, pursuant to the Open Market Emissions Trading (OMET) Program rules at N.J.A.C. 7:27-30, elect to receive DER credits instead. In such case, the person shall also file a Notice of DER Credit Generation as required by the OMET Program rules, and the Department shall request that the NATS Administrator transfer any allowance that would otherwise have been allocated to the claimant into a retirement account.
- (e) Prior to filing a claim under this section, a person shall establish a general account in the NATS pursuant to the procedures at N.J.A.C. 7:27-31.13.
- (f) A claim for **\*incentive\*** allowances **\*[from the Incentive Reserve]\*** shall include:
  1. Documentation that the person submitting the claim is eligible to submit a claim for **\*incentive\*** allowances **\*[from the Incentive Reserve]\*** pursuant to (c) above;
  2. Specification of the amount of electric generation or savings during the control period that is being claimed, expressed in MW-hr as calculated pursuant to **\*[(e)]\* \*(g)\*** below;
  3. 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;
  4. Citation of the unique identification number assigned to a general account held by the claimant in the NATS;
  5. Specification as to whether the claimant wishes to receive credit for the electric generation or savings as allowances or as DER credits. If the claimant wishes to receive DER credits, the claimant shall include the total number of DER credits claimed to have been generated pursuant to N.J.A.C. 7:27-30 during the control period; and

6. Certification in accordance with N.J.A.C. 7:27-1.39.

- (g) The amount of electric generation or savings being claimed shall be determined consistent with the following:

*\*[(AGENCY NOTE: The Department is seeking comment on which of the guidance documents proposed in 1 below should be used for quantifying electricity consumption savings. After taking into consideration the comments received during the public comment period, the Department intends to elect to adopt one of these two alternatives.)*

**ALTERNATIVE 1]\***

1. For energy efficiency measures, the amount of electricity claimed to be saved shall be calculated pursuant to the guidance document: "Measurement Protocol for Commercial, Industrial and Residential Facilities," \*[issued by New Jersey's Board of Regulatory Commissioners on April 28, 1993,]\* incorporated by reference **\*at N.J.A.C. 7:27-31.21\*** \*[\*]. This guidance document may be obtained by submitting a request to the Department at the following address:

New Jersey Department of Environmental Protection  
Air Quality Rule Development Section  
401 East State Street -- P.O. Box 418  
Trenton, NJ 08625-0418;]\*

**\*[ALTERNATIVE 2**

1. For energy efficiency measures, the amount of electricity claimed to be saved shall be calculated pursuant to the guidance document: "International Performance Measurement and Verification Protocol for Accrediting Emission Reductions from Energy Efficiency" issued by the United States Department of Energy in March 1996, incorporated herein by reference. This guidance document may be obtained by submitting a request to the Department at the following address:

New Jersey Department of Environmental Protection  
Air Quality Rule Development Section  
401 East State Street -- P.O. Box 418  
Trenton, NJ 08625-0418;]\*

- \*[2.** For energy efficiency measures, no reduction in electricity consumption that is a result of decreased utilization may be used as a basis for claiming allowances from the Incentive Reserve]\* ; and

- \*[3.]\* \*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.

- (h) A claim shall be submitted to the Department by October **\*[15]\* \*30\*** of the year in which the control period occurred on which the claim is based to the following address:

ATTN: NOX BUDGET INCENTIVE ALLOWANCE CLAIM

New Jersey Department of Environmental Protection

Office of Air Quality Management

401 East State Street -- P.O. Box 418

Trenton, NJ 08625-0418

- (i) No **\*incentive\*** allowances shall be allocated **\*[from the Incentive Reserve]\*** unless the Department approves the claim. Bases for disapproval of a claim include the following:
1. The claim was not received by the Department by October **\*[15]\* \*30\*** of the year in which the control period occurred on which the claim is based;
  2. The claim does not include all of the items required at (d) and (f) 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; and
  5. The person submitting the claim did not establish a general account in the NATS pursuant to (e) above.

7:27-31.9 Permits

- (a) The owner or operator of a budget source shall ensure that the operating permit issued under N.J.A.C. 7:27-22 which applies to the budget source shall incorporate all applicable requirements and provisions of this subchapter, including but not limited to the following:
1. The requirement at N.J.A.C. 7:27-31.3(i) to have, by December 31 of each year beginning in 1999, a number of allowances in a budget source's compliance account which is at least equal, in emissions value, to the NO<sub>x</sub> emissions of the source during the current year control period;
  2. The requirement at N.J.A.C. 7:27-31.3(f) for the owner or operator of a budget source to designate a responsible person who will be the authorized account representative for the budget source and have the authority to submit transfer requests to the NATS Administrator and certify and submit reports to the NATS and the NETS that pertain to the budget source; and
  3. The requirement at N.J.A.C. 7:27-31.14(a) and 31.16 for the owner or operator of a budget source to monitor and report NO<sub>x</sub> emissions from the budget source.
- (b) **\*[Even if there are sufficient allowances in a budget source's compliance account to account for the NO<sub>x</sub> emissions during a control period, a permittee is not authorized to allow the emissions to occur if they would contravene an]\* \*Holding allowances in a budget source's**

**compliance account in order to authorize emissions of NO<sub>x</sub> pursuant to this subchapter does not relieve or waive a permittee's responsibility to comply with any of the following:**

1. **Any**\* applicable NO<sub>x</sub> emission standard established at N.J.A.C. 7:27-19 \*[,]\* **\***;
  - 2.\* **\*[a]\* any permit limit \*[,]\* or condition;**\* or
  - \*3.\*** **\*[any]\* Any other emission limit that applies to the budget source.**
- (c) A permittee does not need to change an operating permit, or a preconstruction permit and certificate, to reflect the transfer of allowances into or out of a budget source's compliance account.
- (d) With respect to compliance with (a) above, if an application pertaining to the budget source had previously been submitted to the Department prior to \*[(the operative date of this subchapter), an application for an amendment or modification of the permit]\* **\*August 16, 1998:\***
- \*1. A seven-day notice, significant modification, or renewal\*** shall be submitted to the Department by \*[(]\* 90 days after the \*[operative date of this subchapter)]\* **\*Department approves the monitoring plan pursuant to N.J.A.C. 7:27-31.14 if the Department had already approved the operating permit application; or\***
  - \*2. An update to the operating permit application shall be submitted to the Department by 90 days after the Department approves the monitoring plan pursuant to N.J.A.C. 7:27-14 if the Department had not yet approved the operating permit application\* .**
- (e) If an opt-in source is located at a facility subject to the operating permit requirements at N.J.A.C. 7:27-22, the owner or operator of the source shall incorporate the opt-in approval of the source into the operating permit, in accordance with (a) above. This shall be done through the initial application for the operating permit, through a seven-day notice or an application for a minor modification or a significant modification, or through an application for a renewal, whichever applies pursuant to N.J.A.C. 7:27-22. The application shall specify this subchapter as an applicable requirement, in accordance with N.J.A.C. 7:27-22.6(f)6. Such incorporation shall include incorporation of the requirement established under this subchapter for the owner or operator to prevent emissions from the source from exceeding, in any year, the allowances held for the source.
- \*(f) In accordance with the provisions at N.J.A.C. 7:27-22, any change made to an budget source which is at a facility subject to the operating permit requirements must be incorporated into the operating permit and must be adequately addressed in the compliance plan.\***

7:27-31.10 Allowance use, transfer and retirement

- (a) An allowance may be used, in a given year, to meet a budget source's NO<sub>x</sub> Budget Program compliance obligations pursuant to N.J.A.C. 7:27-31.3(i) only if:
1. The allowance has been allocated or transferred to the source's compliance account by the allowance transfer deadline for that year; and
  2. The allowance is valid in the current year for use for compliance with the end-of-season reconciliation requirements. The serial number assigned to an allowance by the NATS Administrator indicates the initial year in which the allowance may be used. The allowance may be used in the initial year or in any year thereafter.
- (b) An allowance may be used to meet the compliance obligations of a budget source located in New Jersey, even though the allowance was initially allocated in another jurisdiction, provided that the transfer of the allowance to the budget source's compliance account is carried out in a manner consistent with the requirements of this section.
- (c) At any time between \*[January 31]\* **\*the end of the reconciliation process\*** and December 31 during any year, an authorized account representative may authorize the transfer of one or more allowances from the represented account to another account. **\*During the period between January 1 and the end of the reconciliation process, only allowances that are incapable of being used during such reconciliation process may be transferred. The only allowances that are effectively frozen during the reconciliation period are those allowances in compliance accounts that have serial numbers indicating that they could be used during the ongoing reconciliation process.\*** Such a transaction is initiated by the submission of an allowance transfer request to the NATS Administrator in accordance with (d) below. Such transfers of allowances are voluntary actions on the part of authorized account representatives and reflect that:
1. The holding of the allowance(s) has passed from one person to another by whatever means, including but not limited to a sale, a gift, auction, a barter arrangement, or other terms of exchange; or
  2. The person holding the allowance(s) has elected to move the allowance(s) from one account to another account also under the person's control.
- (d) The following procedures shall be carried out to effect an allowance transfer:
1. The transfer shall be documented on a transfer request form obtained from the NATS Administrator;
  2. The documentation shall include, at a minimum, the following information:
    - i. The NATS account numbers for both the originating account and the acquiring account;

- ii. The name **\*telephone number, fax number,\*** and address of the persons to which the originating account and the acquiring account are assigned; and
    - iii. The serial number of each allowance being transferred;
  3. The transfer request shall include a statement of certification which must be signed by the AAR for the originating account. This statement of certification shall be:
    - \*[i. If the account is a compliance account:]\* “I am authorized to make this submission on behalf of the owners and operators of the budget source **\*(or in the case of general accounts, the parties with an ownership interest in the allowances held in the account)\*** and I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment” \*[, and]\*
    - \*[ii. If the account is a general account that does not pertain to a budget source: “I am authorized to make this submission on behalf of the holder(s) of the account and I hereby certify under penalty of law, that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment”;]\*
  4. The transfer request form shall be submitted on paper, unless the NATS Administrator establishes procedures which allow the form to be submitted electronically; and
  5. The AAR for the originating account shall provide a copy of the transfer request to each owner or operator of the budget source.
- (e) Transfer requests shall be processed by the NATS Administrator in order of receipt.
- (f) The transfer request is determined to be valid when the following has been verified by the NATS Administrator:
1. Each allowance listed in the transfer request is held in the originating account at the time the transfer is to be recorded;
  2. The person acquiring the allowances has an account in the NATS; and
  3. The transfer request has been certified and submitted by the person named as AAR for the originating account.

- (g) After a transfer request is determined to be valid by the NATS Administrator, the transfer shall be recorded in the NATS as follows: the allowance(s) with the serial number(s) specified in the transfer request shall be deducted from the originating account and added to the acquiring account.
- (h) The NATS Administrator shall provide notification of the transfer to the AAR of the originating account, to the AAR of the acquiring account, and to the Department.
- (i) If the acquiring account or originating account is assigned to a person located in a jurisdiction outside of New Jersey, the NATS Administrator shall also provide notification of the transfer to the environmental agency serving the other jurisdiction.
- (j) Notification pursuant to (g) or (h) above shall, at a minimum, include the following:
  - 1. The effective date of the transfer;
  - 2. The NATS account numbers for both the originating account and the acquiring account;
  - 3. The name and address of the persons to which the originating account and the acquiring account are assigned; and
  - 4. The total number of allowances transferred, and the serial number of each allowance.
- (k) This section allows the interstate and interjurisdictional transfer of allowances. However, the transfer of an allowance initially allocated by the Department pursuant to N.J.A.C. 7:27-31.7 to the compliance account of a budget source located in another jurisdiction is prohibited, until the other jurisdiction has also adopted rules which allow the interstate trading of allowances and is implementing a NO<sub>x</sub> Budget Program, in a manner consistent with the agreements in the OTC MOU.
- (l) At any time between January 31 and December 31 during any year, a person who holds an allowance in an account may elect to permanently retire that allowance. In order to permanently retire one or more allowances, the AAR of the account in which the allowance is held shall submit to the NATS Administrator a retirement request. A retirement request shall conform to the same procedures for a transfer request given at (c) above. The NATS Administrator shall process the retirement request following the same procedures as set forth for transfer requests at (d) through (i) above.

#### 7:27-31.11 Allowance banking

- (a) If an allowance held in a general account or a compliance account is not used to satisfy the compliance requirement at N.J.A.C. 7:27-31.3(i), is not otherwise deducted from the account pursuant to N.J.A.C. 7:27-31.17 or 31.19, and is not permanently retired pursuant to N.J.A.C. 7:27-31.10, then that allowance may continue to be held in the account until the next or



subsequent control periods. This retention of one or more allowances in an account from one year to a future year is referred to as “banking.”

- (b) Each year the NATS Administrator shall flag allowances that remain in an account as of the allowance transfer deadline (that is, December 31) as “banked” allowances.
- (c) By March 1 of each year, the NATS Administrator shall:
  - 1. Determine whether the total number of allowances banked in the NATS as of January 1 of the current year exceeds 10 percent of the total regional base emission budget for the current year control period; and
  - 2. Announce that for the current year control period:
    - i. If the banked allowances are determined to be equal to or less than 10 percent of the total regional base emission budget, all banked allowances can be used in the current year on a one-for-one basis; or
    - ii. If the banked allowances are determined to be greater than 10 percent, the constraints on use of banked allowances as set forth in (d) below apply.
- (d) If the NATS Administrator determines that the total number of banked allowances exceeds 10 percent of the regional base emission budget for the current year control period, a portion of the banked allowances shall be allowed to be used on a one-for-one basis, but the remainder of the banked allowances shall be required to be used on a two-for-one basis. The NATS Administrator shall determine which banked allowances fall in each class in accordance with the following:
  - 1. The NATS Administrator shall determine the ratio to be used to determine which banked allowances may be used on a one-for-one basis, as follows:

$$\text{Ratio} = \frac{0.10 \times B_R}{A_B}$$

Where:

$B_R$  = The annual regional base  $\text{NO}_x$  emissions budget; and

$A_B$  = The total number of banked allowances in all NATS accounts; and

- 2. **\*[The]\*\*As prescribed at N.J.A.C. 7:27-31.17(g), during the reconciliation process, the\*** NATS Administrator shall apply the ratio calculated in (d)1 above to the number of banked allowances in each account to determine the number of banked allowances in the account which can be used in the current year control period on a one-for-one basis. The remaining number of banked allowances in each account shall be used on a two-for-one basis.

7:27-31.12 Early reductions

- (a) Pursuant to this section, the owner or operator of a budget source may claim early reduction credit based on certain reductions in the emissions from a budget source during 1997 and 1998. If the claim is approved, the Department shall subsequently convert such emission reductions into allowances.
- (b) The owner or operator of a budget source who wishes to claim early reductions pursuant to this section shall submit the information specified in (c) below to the Department by October 31, 1998 to the following address:

ATTN: NOX BUDGET EARLY REDUCTION CLAIM  
New Jersey Department of Environmental Protection  
Office of Air Quality Management  
P.O. Box 418  
Trenton, NJ 08625-0418

- (c) A claim shall include the following information:
  - 1. Identification of the source, including the \*[rate]\* **\*rated\*** heat input capacity and type of combustion unit;
  - 2. Specification of the period(s) for which early reductions are being claimed. Early reductions may be claimed for the period from May 1 through September 30 in either the year 1997, 1998, or in both years;
  - 3. The following information pertaining to the source's operation during the period(s) specified in (c)2 above:
    - i. For each type of fuel allowed to be combusted in the source, the lowest allowable NO<sub>x</sub> emission rate applicable during the period(s), expressed in pounds per MMBtu;
    - ii. For each type of fuel allowed to be combusted in the source, the total amount of each type combusted in the source during the period(s), expressed in MMBtu; and
    - iii. The total heat input to the source during the period(s), expressed in MMBtu;
  - 4. The following information pertaining to the source's operation during the period of the May 1 through September 30, during two previous years. This information shall be submitted for the two years immediately preceding the submission of the claim, unless the owner or operator can demonstrate that the May 1 through September 30 periods in two other consecutive years within the last five years are more representative of normal source operation. In such case, the information shall be submitted for the May 1 through September 30 period in each of the five years immediately preceding the submission:

- i. The total NO<sub>x</sub> emissions of the source during each May 1 through September 30 period, expressed in pounds;
  - ii. The total heat input to the source during each May 1 through September 30 period, expressed in MMBtu;
  - iii. The net electric \*[generation]\* \*output\* of source during each period, expressed in MW-hr;
  - iv. The net useful heat output of the source, during each period, expressed in MMBtu.
5. If the source operated in 1990:
  - i. The total NO<sub>x</sub> emissions of source during the period of May 1 through September 30, 1990, expressed in pounds; and
  - ii. The total heat input to the source during the period of May 1 through September 30, 1990, expressed in MMBtu;
6. If the early reductions are being realized as a result of repowering or replacing a budget source which operated in 1990:
  - i. Proof that the original budget source which operated in 1990 permanently shut down prior to September 30, 1998, and the date on which shutdown occurred;
  - ii. Proof that a permit for construction for the repowered or replacement source has been issued and the date on which operation of the repowered or replacement source commenced is after October 1, 1990;
  - iii. The NO<sub>x</sub> emissions of source that has been repowered or replaced during the period of May 1 through September 30, 1990, expressed in pounds; and
  - iv. The total heat input to the original source during the period of May 1 through September 30, 1990, expressed in MMBtu;
7. If the source commenced operation after 1990, but (c)6 above does not apply:
  - i. The total heat input to the source during each May 1 through September 30 period for the most recent five years of operation; and
  - ii. The total NO<sub>x</sub> emissions of the source during each May 1 through September 30 period for the most recent five years of operation;
8. A detailed description of the method by which each piece of data specified in (c)3 through 7 above was collected and calculated, including all assumptions upon which the methods were based;

9. Estimates of the level of inaccuracy and degree of uncertainty of each piece of data specified in (c)3 through 7 above, and an explanation of *\*[the]\* **any*** adjustment factor(s) applied to correct for *\*[the estimated]\* **any significant*** resulting inaccuracy;
  10. The calculations made to determine the number of early reduction credits claimed specified in (d), (e), and (f) below as applicable;
  11. One of the following:
    - i. A statement that the 1997 and/or 1998 emission reductions on which the claim for early reductions is being based have not been used and will not be used, in whole or in part, as a basis for generating DER credits pursuant to N.J.A.C. 7:27-30 or emission offsets pursuant to N.J.A.C. 7:27-18; or
    - ii. Proof of permanent retirement of any DER credits generated pursuant to N.J.A.C. 7:27-30 and of any emission offsets created pursuant to N.J.A.C. 7:27-18 which are based in whole or in part, on the 1997 and/or 1998 emission reductions which are the basis for the early reduction being claimed; and
  12. Certification pursuant to N.J.A.C. 7:27-1.39.
- (d) The amount of early reductions eligible to be claimed for a given May 1 through September 30 period, by a source calculated in accordance with the following, with adjustments made for inaccuracy and uncertainty in accordance with (j) below:

$$\text{Early Reductions} = \left( \frac{E_B}{P_B} - \frac{E_P}{P_P} \right) \times P_P$$

Where:

$E_B$  = The total baseline  $\text{NO}_x$  emissions of the source as determined in accordance with (e) below, expressed in tons;

$P_B$  = The total baseline productivity of the source as determined in accordance with (f) below;

$E_P$  = The total emissions of the source during the May 1 through September 30 period for which early reductions are being claimed as determined in accordance with (g) below, expressed in tons; and

$P_P$  = The total productivity of the source during the May 1 through September 30 period for which early reductions are being claimed as determined in accordance with (h) below.

- (e) The total baseline emissions ( $E_B$ ) for the purpose of calculation in (d) above shall be determined in accordance with the following:
1. Determine the baseline emission rate. This rate shall be *\*[the]\** expressed in pounds per MMBtu and shall be the lowest of the following rates:

- i. If the source is a fossil fuel fired *\*[boiler or]\** indirect heat exchanger with a maximum rated heat input capacity of *\*at least\** 250 MMBtu per hour, the greater of 0.20 pounds NO<sub>x</sub> per MMBtu or 35 percent of the 1990 actual NO<sub>x</sub> baseline emission rate of the source *\*[,]\* \*(\*expressed in pounds per MMBtu \*, and determined by dividing the total NO<sub>x</sub> emissions of the source during the May 1 through September 30, 1990 period, as reported pursuant to(c)5i above, by the total heat input to the source during the May 1 through September 30, 1990 period, as reported pursuant to (c)5ii above)\** ;
  - ii. The source's actual 1990 NO<sub>x</sub> baseline emission rate, determined by dividing the total NO<sub>x</sub> emissions of the source during the May 1 through September 30, 1990 period, as reported pursuant to *\*[(d)]\* \*(\*c)\** 5i above, by the total heat input to the source during the May 1 through September 30, 1990 period, as reported pursuant to *\*[(d)]\* \*(\*c)\** 5ii above; or
  - iii. The lowest allowable NO<sub>x</sub> emission rate of the source for the period May 1 through September 30 of the year for which early reductions are being calculated. **\*If the lowest allowable NO<sub>x</sub> emission rate of the source is a RACT Alternative Emission Limit, then the RACT emission limit as specified at N.J.A.C. 7:27-19 shall be the baseline emission rate.\*** If more than one type of fuel was combusted during the period, then the lowest allowable NO<sub>x</sub> emission rate of the source shall be a heat input weighted average of lowest allowable NO<sub>x</sub> emission rate for each fuel type; and
2. Determine the utilization for the source in accordance one of the following three methods:
    - i. If the May 1 through September 30 period during the two years immediately preceding the submission of the claim are representative of normal source operation, the utilization shall be an average of the actual heat input to the source during the two consecutive May 1 through September 30 periods;
    - ii. If the owner or operator can demonstrate that two other May 1 through September 30 periods within the last five years are more representative of normal source operation, the utilization shall be an average of the actual heat input to the source during these other two consecutive May 1 through September 30 periods; or
    - iii. If the owner or operator of the source can document that the source had not operated during one of the two consecutive May 1 through September 30 periods preceding the submission of the claim, the utilization shall be the total heat input to the source during the single previous May 1 through September 30 periods immediately preceding the submission of the claim;
  3. Calculate the source's average baseline emissions by multiplying the baseline emission rate determined in 1 above by the utilization determined in (e)2 above; and

4. The total baseline emissions ( $E_B$ ) to be used in (d) above shall be the average baseline emissions calculated in (e)3 above, unless the source was operating in 1990 and this average is greater than the source's actual 1990 emissions during the period May 1 through September 30, 1990 as reported pursuant to (c)5i above. In such case, the total baseline emissions ( $E_B$ ) shall be the source's actual 1990 emissions during the period May 1 through September 30, 1990.
- (f) The total productivity ( $P_B$ ) for the purpose of calculation in (d) above shall be determined in accordance with the following:
1. Establish the applicable productivity period. If the baseline emissions ( $E_B$ ) determined in (e) above is calculated using a value of utilization based on:
    - i. Emissions in 1990, the applicable productivity period is May 1 through September 30, 1990;
    - ii. Emissions in two consecutive years, the applicable productivity period is the two May 1 through September 30 periods in those two consecutive years; or
    - iii. Emissions during the single May 1 through September 30 period immediately preceding the submission of the claim, the applicable productivity period is that single period;
  2. For sources that produce electricity, the baseline productivity is:
    - i. If the applicable period is a two consecutive years period, the average net electric output, expressed in MW-hr, of the source during the two consecutive periods; and
    - ii. If the applicable productivity period is a single May 1 through September 30 period in 1990 or in a most recent year, the average net electric output, expressed in MW-hr, during the period in that single year;
  3. For sources that produce useful energy other than electricity, the baseline productivity is:
    - i. If the applicable period is a two consecutive years period, the average net useful heat output, expressed in MW-hr, of the source during the two consecutive periods; and
    - ii. If the applicable productivity period is a single May 1 through September 30 period in 1990 or in a most recent year, the average net useful heat output, expressed in MW-hr, during the period in that single year;
  4. For sources that produce both electricity and other useful energy, the sum of the results of (f)2 and 3 above.

- (g) **\*The source's total emissions ( $E_p$ ) during the May 1 through September 30 period for which early reductions are being claimed, for the purposes of the calculation in (d) above, shall be the total  $\text{NO}_x$  emissions as reported under (c)4i above.\***

**\*(h)\*** The total productivity of the source ( $P_p$ ), during the May 1 through September 30 period for which early reductions are being claimed, for the purposes of the calculation in (d) above, shall be determined in accordance with the following:

1. For sources that produce electricity, the total net electric output, expressed in MW-hr, during the May 1 through September 30 period for which early reductions are being claimed;
2. For sources that produce useful energy other than electricity, the total net useful heat output, expressed in MW-hr, during the May 1 through September 30 period for which early reductions are being claimed; and
3. For sources that produce both electricity and other useful energy, the sum of the results of **\*(g)\*** 1 and 2 above.

**\*(h)\*** The source's total emissions ( $E_p$ ) during the May 1 through September 30 period for which early reductions are being claimed, for the purposes of the calculation in (d) above, shall be the total  $\text{NO}_x$  emissions as reported under (c)4i above.]\*

- (i) The amount of early reductions eligible to be claimed by a source which has been repowered or by a new source which has replaced a budget source shall be calculated in accordance with (d) above, except that:

1. The total baseline emissions of the source ( $E_b$ ) and the baseline productivity of the source ( $P_b$ ) shall be based on the original source; and
2. The determination of the total productivity and the source's total emissions ( $E_p$ ) during the May 1 through September 30 period ( $P_p$ ) shall be based on the operation of the repowered source or the new replacement source.

- (j) **\*[The owner or operator shall estimate the level of inaccuracy and degree of uncertainty in the calculation of the amount of early reduction credits being claimed, and shall apply an adjustment factor to correct for the estimated resulting inaccuracy.]\* \*(Reserved.)\***

- (k) The Department shall approve all claims for early reduction credits upon verification **\*by the Department\*** that the reductions are real, properly quantified, and surplus. If the information submitted pursuant to (c) above is reviewed and found by the Department as true, accurate and complete, and if the early reduction credits are calculated in accordance with the procedures in (d) above, then the early reduction credits shall be considered real, properly quantified, and surplus.

- (l) The Department shall deny any claim for early reduction credits if:

1. The claim is not submitted in accordance with (b) above,
  2. The claim is missing any information required in (c) above;
  3. The claim contains any piece of information that the Department determines is not true, accurate or complete; or
  4. The number of credits being claimed have not been calculated properly in accordance with (d) above.
- (m) Notwithstanding (l)4 above, if during its review of a claim, the Department finds that the claimant has claimed an inappropriate number of early reduction credits due to a clear computational error, the Department shall so inform the claimant and adjust the number early reduction credits in lieu of denying the claim.
- (n) On or before May 1, 1999, in order to provide the interested public an opportunity to comment, the Department shall publish a notice in the New Jersey Register which sets forth the number of early reduction credits the Department intends to convert into allowances, and lists each owner or operator who generated credits. In addition, the Department shall seek comment from the members of the OTC who are also implementing NO<sub>x</sub> Budget Programs.
- (o) The notice published in accordance with (n) above shall provide a comment period of at least 30 days commencing with the New Jersey Register's date of publication. The Department shall take into consideration all **\*relevant\*** comments received during the comment period when making its final determination as to whether to approve the claim for early reduction credit. If, at the time of approval of a claim for early reduction credits, the amount of early reduction allowances is more than the amount specified in the notice of intent to approve published in the New Jersey Register, pursuant to (n) above, the Department shall publish a second notice in which it specifies this revised amount and sets forth the reasons for this revision.
- (p) The Department shall provide the following information to the Administrator of the NATS and to USEPA, Region II:
1. A list of all sources that have generated approved early reduction credits;
  2. The number of early reduction allowances approved for each source; and
  3. Specification of whether each owner or operator has elected to receive the allowances or to accept an amount of DER credits, equivalent in value to the early reduction allowances.

7:27-31.13 NO<sub>x</sub> Allowance Tracking System (NATS)

- (a) The NO<sub>x</sub> Allowance Tracking System (NATS) is the official electronic database serving the NO<sub>x</sub> Budget Program which tracks all allowance transfer, use and retirement. The NATS shall



keep track of each allowance held in each account and shall provide information for a specific time period such as the following:

1. The allowances transferred to and from each account;
  2. The allowances retired; and
  3. The allowances deducted for end-of season reconciliation purposes.
- (b) Each allowance tracked in the NATS shall have a unique identification number, assigned by the NATS Administrator. The serial number of each allowance shall indicate the initial year the allowance may be used for compliance with the end-of-season reconciliation requirements.
- (c) The NATS Administrator shall establish and maintain accounts in the NO<sub>x</sub> Allowance Tracking System (NATS), including:
1. On behalf of the owner or operator of each budget source, a source-specific compliance account for each budget source;
  2. On behalf of the Department, **\*[a] general account\*s\*** that will serve as the Department's "primary" account **\*and other "reserve" accounts\*** for allocation purposes **\*[, that is the account from which all allowances allocated]\*** pursuant to N.J.A.C. 7:27-31.7 **\*[(b) and (d) shall be transferred]\***; and
  3. A retirement account to which allowances that have been deducted for end-of-season reconciliation shall be transferred **\*, a retirement account to which allowances used for penalty purposes will be transferred, and a retirement account to which allowances which are voluntarily retired shall be transferred.\***
- (d) In addition to the accounts described in (c) above, the NATS Administrator shall establish **\*a general account for any person who completes and submits a General Account Information form to the NATS Administrator.\*** **\*[an account in the NATS upon request of any of the following persons, provided the request is submitted in accordance with the procedures in (j) below:**
1. Any person may request the establishment of one or more general accounts. The Department, for example, shall request the establishment of several general accounts, including the reserve accounts to be used in the allocation procedures described at N.J.A.C. 7:27-31.7, and a "discretionary" account to hold allowances withheld from allocation pursuant to N.J.A.C. 7:27-31.3(f); and
  2. The Department shall request the establishment of one or more retirement accounts. The Department, for example, shall request the establishment of a retirement account to which allowances used for penalty purposes will be transferred and of a retirement account to which allowances which are voluntarily retired shall be transferred.]\*

- (e) At the request of the member jurisdictions of the OTC, the United States Environmental Protection Agency's Acid Rain Division has agreed to serve as the NATS Administrator. Requests for the establishment of an account and any other communication directed to the NATS Administrator shall be addressed as follows:

ATTN: NOX BUDGET PROGRAM  
United States Environmental Protection Agency  
Acid Rain Division - Mail Code 6204J  
401 M Street SW  
Washington, DC 20460

- (f) **\*(Reserved.)\*** **\*[A person submitting a request for the establishment of an account shall include the following information on the applicable form obtained from the NATS Administrator:**
1. Specification of all persons who are holder(s) of the account;
  2. The purpose(s) for which the account is to be used;
  3. An "Account Certificate of Representation," completed in accordance with (i) below;
  4. Any other information regarding the account as requested on the form.]\*
- (g) The holder of **\*[an]\* \*a compliance\*** account shall designate an authorized account representative and one alternate authorized account representative for the account in accordance with (i) through (j) below. The authorized account representative and the alternate authorized account representative shall be the sole persons who have the authorities and responsibilities set forth in (l) through (n) below.
- (h) The designation of an authorized account representative for **\*[an]\* \*compliance\*** account shall be **\*submitted to the Department no later than when any monitoring plan is due to be submitted to the Department pursuant to N.J.A.C. 7:27-31.14 or, if applicable, when an opt-in application is submitted to the Department pursuant to N.J.A.C. 7:27-31.4.\*** **\*[carried out in accordance with the following schedule:**
1. For each budget source which operated any time during the period May 1 through September 30, 1990 or which has commenced operating as of the operative date of this subchapter, the owner or operator of the source shall complete the designation of an authorized account representative by (30 days after the operative date of this subchapter);
  2. For each budget source which commenced operation after the operative date of this subchapter, the owner or operator of the source shall complete the designation of an authorized account representative by the date for which an application for a permit pursuant to N.J.A.C. 7:27-8 is submitted to the Department;

3. For each opt-in source, the owner or operator of the source shall complete the designation of an authorized account representative by the date for which an application is submitted to the Department pursuant to N.J.A.C. 7:27-31.4; and
  4. For each account requested to be established pursuant to (d) above, the person requesting the establishment of the account shall include the designation of an authorized account representative with the request for the establishment of the account.]\*
- (i) The following procedure shall be used for the designation of an authorized account representative or an alternate authorized account representative **\*of a compliance account\***:
1. The holder of the account shall obtain from the NATS Administrator the form entitled "Account Certificate of Representation;"
  2. The holder of the account shall provide the information requested on the form. This shall include, at a minimum, the following:
    - i. If the account is a compliance account for a specific budget source, a brief description of the budget source, the name of the facility at which the source is located, and the state in which the budget source is located;
    - ii. If the account is a compliance account for a specific budget source, the identification numbers for the budget source, including any number assigned by the state and any number assigned by the facility;
    - iii. The name, mailing address, telephone and facsimile number of the authorized account representative and of any alternate authorized account representative;
    - iv. If the account is a compliance account for a specific budget source, a list of the owners and operators of the budget source, or the list of the owners and operators of the entity applying for the general account;
  3. If the account is a compliance account, the "Account Certificate of Representation" form shall contain the following statement: "I certify that I,\_\_\_\_( name)\_\_\_\_, was selected as the authorized account representative as applicable by an agreement binding on the owners and operators of the budget source legally designated as \_\_\_\_\_(name of source)\_\_\_\_." The authorized account representative shall sign the form and, in doing so, shall attest to this certification;
  4. \*[If the account is a general account, the "Account Certificate of Representation" form shall contain the following statement: "I certify that I,\_\_\_\_( name)\_\_\_\_, was selected as the authorized account representative as applicable by an agreement binding on the holder(s) of the account \_\_\_\_\_(insert one of the following, as applicable: "that will be established pursuant to the accompanying request" or "that has the following identification number:\_\_\_\_(insert number)"\_\_\_\_." The authorized account representative shall sign the form and, in doing so, shall attest to this certification;

5.]\* The authorized account representative shall submit the completed and signed form to the NATS Administrator at the address listed on the form or the instructions to the form. A completed and signed form constitutes the agreement of representation. Upon receipt of the form by the NATS Administrator, the named individual(s) are officially designated the authorized account representative and the alternate authorized account representative; and

\*[6.]\* \*5.\* Once the NATS Administrator has recorded the designation of the named individual as authorized account representative or the alternate authorized account representative, the NATS Administrator shall confirm the designation to the holder of the account.

\*[(f)]\* \*(j)\* Each account in the NATS shall have a unique identification number. Utilizing the information provided on the "Account Certificate of Representation" form \*[pursuant to (i) above,]\* **\*for a compliance account or on the General Account Information form for a general account,\*** the NATS Administrator shall associate the following information, at minimum, with each account: name of account owner(s) and operator(s), name of the authorized account representative, name of the alternative authorized account representative, mailing address of the authorized account representative, phone number of the authorized account representative, \*[street address of the facility at which the budget source is located (if applicable),]\* and the State in which the budget source is located (if applicable).

(k) A person may replace an individual who has been previously designated as an authorized account representative or an alternate authorized account representative with another individual. This shall be done through the submittal of a new "Account Certificate of Representation" form **\*for a compliance account or of a new General Account Information form for a general account\*** \*[pursuant to the procedures in (g) above]\*.

(l) The authorized account representative and the alternate authorized account representative are the sole persons who may submit:

1. A request for a transfer of one or more allowances from the NATS account they are authorized to represent to another account; or
2. A report to the NATS on behalf of an account, as required pursuant to N.J.A.C. 7:27-31.16, Reporting.

(m) Even through a request or a report may be submitted by the alternate authorized account representative pursuant to (l) above, the "primary" authorized account representative remains responsible for all allowance transfer requests and for all required reports.

(n) All correspondence from the NATS Administrator to the holder of an account shall be directed to the primary authorized account representative of the account.

7:27-31.14 Emissions monitoring

- (a) The owner or operator of each budget source shall monitor the NO<sub>x</sub> emissions from each budget source as specified by this section, by the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program," the "Electronic Data Reporting: Acid Rain Program/NO<sub>x</sub> Budget Program -- Version 2.0," and the "NO<sub>x</sub> Budget Program Monitoring Certification and Reporting Instructions." \*[These guidance documents, which were prepared for the OTC are incorporated herein by reference, as are any subsequent revisions thereto. Copies of these documents may be downloaded from USEPA Acid Rain Division's world wide web page, at <<http://www.epa.gov/acidrain>>, or may be requested by writing to the following address:

ATTN: NOX BUDGET PROGRAM  
United States Environmental Protection Agency  
Acid Rain Division - Mail Code 6204J  
401 M Street SW  
Washington, DC 20460]\*

- (b) By \*[the operative date of this subchapter)]\* **\*August 16, 1998\***, the owner or operator of each budget source that commenced operation as of \*[the operative date of this subchapter)]\* **\*August 16, 1998\*** shall submit to the Department a **\*total of three (3) copies of the\*** monitoring plan **\*,which includes diskette and papercopy attachments,\*** in accordance with the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program" and this section. \*[The monitoring plan shall include, but not be limited to, a description of the monitoring systems to be used for the source. Budget sources not subject to 40 C.F.R. Part 75 shall include the information outlined in (h) and (i) below in the submittal.]\* The monitoring plan shall be submitted to the following address:

ATTN: NOX BUDGET MONITORING PLAN  
New Jersey Department of Environmental Protection  
Bureau of Technical Services  
380 Scotch Road -- P.O. Box 411  
Trenton, NJ 08625-0411

- (c) The owner or operator of each budget source that commenced operation as of \*[the operative date of this subchapter)]\* **\*August 16, 1998\*** shall install and commence operation of the emission monitoring systems set forth in the approved plan by no later than \*[July 1, 1998]\* **\*60 days after the Department approves the monitoring plan or no later than a date otherwise specified in the approval of the monitoring plan\***. The owner or operator of each budget source shall ensure that the emission monitoring systems meet all the certification testing requirements specified in the "Guidance for Implementation of Emission Monitoring Requirements of the NO<sub>x</sub> Budget Program" by no later than April 30, 1999. **\*Notification of testing and test protocols must be submitted to the Department's Bureau of Technical Services at least 30 days (preferably 60 days) in advance of any certification testing.\***

- (d) The owner or operator of each budget source that commences operation after \*[(the operative date of this subchapter)]\* **\*August 16, 1998\*** shall:
1. Submit a monitoring plan to the address listed in (b) above in accordance with the following schedule:
    - i. If the permit application for the source has already been submitted to the Department as of \*[(the operative date of this subchapter)]\* **\*August 16, 1998\***, the plan shall be submitted as of \*[(the operative date of this subchapter)]\* **\*August 16, 1998\***; and
    - ii. If the permit application for the source has not been submitted to the Department as of \*[(the operative date of this subchapter)]\* **\*August 16, 1998\***, the plan shall be submitted at the time \*[of permit application submittal]\* **\*specified by the Department in the conditions of the permit approval\*** .
  2. Install and operate the emission monitoring systems and ensure that they have met all of the certification testing requirements as required by this section by no later than May 1 of the year following the date when operation of the source commences.
- (e) The owner or operator shall perform initial testing and periodic calibration, accuracy testing and quality assurance/quality control testing of all monitoring systems for each budget source as specified in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.”
- (f) During a period when valid data is not being recorded by monitoring devices approved for use to demonstrate compliance with this subchapter, missing or invalid data shall be replaced with representative data in accordance with the missing data provisions of 40 C.F.R. Part 75 and the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.”
- (g) Notwithstanding (f) above, during the period from \*[July 1, 1998]\* **\*when monitoring systems are required to be installed and operated\*** through the earlier of the provisional certification date of the monitors and April 30, 1999, data regarding the source shall be reported, and the owner or operator shall provide an assessment, based on sound engineering judgement, as to whether the data meets the quality assurance tests in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program” and is representative of actual data based on sound engineering judgement. During any other periods when the source is operating or if the data does not meet existing state quality assurance requirements, invalid data shall be replaced with representative data in accordance with the missing data provisions of 40 C.F.R. Part 75 and the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.”
- \*(h) The owner or operator of each budget source subject to 40 C.F.R. Part 75 shall demonstrate compliance with the NO<sub>x</sub> Budget Program with a certified Part 75 monitoring system and is subject to the following requirements:

1. If the source has a flow monitor certified under 40 C.F.R. Part 75, NO<sub>x</sub> emissions in pounds per hour shall be determined using the Part 75 NO<sub>x</sub> CEMS and the flow monitor and by multiplying the results of (h)1i below with the results of (h)1ii below:
    - i. The hourly NO<sub>x</sub> emission rate in pounds per million Btu shall be determined by using the procedure in Section 3 of Appendix F of 40 C.F.R. Part 75; and
    - ii. The hourly heat input in million Btu per hour shall be determined by using the procedures in Section 5 of Appendix F of 40 C.F.R. Part 75;
  2. If the source does not have a certified flow monitor certified under 40 C.F.R. Part 75, NO<sub>x</sub> emissions in pounds per hour shall be determined by multiplying the results of (h)2i below with the results of (h)2ii below:
    - i. The NO<sub>x</sub> emission rate in pounds per million Btu shall be determined by using the procedure in Section 3 of Appendix F of 40 C.F.R. Part 75; and
    - ii. The hourly heat input in million Btu per hour shall be determined by using the procedures in Appendix D of 40 C.F.R. Part 75 relating to optional emissions data protocol for gas-fired and oil-fired units);
  3. If the owner or operator of a source uses the procedures in 40 C.F.R. 75 Appendix E to determine NO<sub>x</sub> emission rate, NO<sub>x</sub> emissions in pounds per hour shall be determined by multiplying the results of (h)3i below with the results of (h)3ii below:
    - i. The NO<sub>x</sub> emission rate, expressed in pounds per MMBtu, determined by using the procedure in Appendix E of 40 C.F.R. Part 75; and
    - ii. The hourly heat input, expressed in MMBtu per hour, determined by using the procedures in Appendix D of 40 C.F.R. Part 75 relating to optional emissions data protocol for gas-fired and oil-fired units);
  4. If the owner or operator of a source uses the procedures in 40 C.F.R. 75 Subpart E to determine NO<sub>x</sub> emission rate, NO<sub>x</sub> emissions in pounds per hour shall be determined by using the approved procedures in accordance with Subpart E of 40 C.F.R. Part 75 and the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program;”
  5. If the source emits to a common stack or to multiple stacks, the emissions of the source shall be monitored in accordance to the procedures contained in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.”
- (i) For a budget source which is not subject to 40 C.F.R. Part 75, the owner or operator shall meet the monitoring requirements of the NO<sub>x</sub> Budget Program by:

1. Preparing and obtaining approval of a monitoring plan as specified in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.” The plan shall contain, as appropriate, the following:
  - i. A description of the monitoring approach to be used;
  - ii. A description of the major components of the monitoring system including the manufacturer, serial number of each component, the measurement span of component and documentation to demonstrate that the measurement span of each component is appropriate to measure all of the expected values;
  - iii. An estimate of the accuracy of the system and documentation to demonstrate how the estimate of accuracy was determined;
  - iv. A description of the tests that will be used for initial certification, initial quality assurance, periodic quality assurance, and relative accuracy meeting all the requirements contained in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program;”
  - v. If the alternative monitoring method of determining heat input involves boiler efficiency testing, a description of the test to determine the boiler efficiency;
  - vi. If the alternative method uses fuel sampling, a description of the test to be used in the fuel sampling program;
  - vii. If the alternative method utilizes a default emission rate or unit specific emission factor, as specified in (j)3 below, the monitoring plan shall include the following:
    - (1) All information necessary to support the emission rate including historical monitoring data and historical fuel usage data. If the source plans to conduct emission testing to determine emission rate, the plan should include a test protocol explaining the testing to be conducted;
    - (2) Procedures which will be utilized to demonstrate that any control equipment operated or any procedures followed during the testing to develop source specific emission factors or during development of load-based emissions curves, are in use when those factors or emission curves are applied to estimate NO<sub>x</sub> emissions; and
    - (3) Alternative uncontrolled emission rates to be used to estimate NO<sub>x</sub> emissions during periods when control equipment is not being used or is inoperable; and
  - viii. If the alternative method utilizes fuel flow meters to determine heat input and such meters have not been certified pursuant to 40 C.F.R. Part 75, the monitoring plan shall include a description of all components of the fuel flow meter, the estimated accuracy of the fuel flow meter, the most recent calibration of each of the



components and the original accuracy specifications from the manufacturer of the fuel flow meter;

2. Determining NO<sub>x</sub> emission rate using a methodology specified in (j) below;
  3. Determining heat input rate using the methodology described in (k) below; and
  4. Converting emission rate and heat input rate to NO<sub>x</sub> emissions in pounds per hour using the procedure described in (m) below.
- (j) Pursuant to (i)2 above, the NO<sub>x</sub> emission rate, expressed in pounds per million Btu, shall be determined by using one of the following methods:
1. The owner or operator of a budget source may elect to implement monitoring in accordance with 40 C.F.R. Part 75.
  2. The owner or operator of a budget source that is required to install and operate a NO<sub>x</sub> CEMS to meet the requirements of 40 C.F.R. Part 60 or to meet other state requirements or permits, shall use that NO<sub>x</sub> CEMS to meet the monitoring requirements of this section. Part 60 monitors utilized for this purpose shall meet quality assurance criteria as described in the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program." Any time a Part 60 CEMS cannot be used to report data for this program because it does not meet the requirements of the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program," missing data shall be substituted using the procedures in 40 C.F.R. Part 75, Subpart D. In addition, a NO<sub>x</sub> CEMS that has not undergone initial certification testing to meet the requirements of 40 C.F.R. Part 75 or 40 C.F.R. Part 60 shall meet the initial certification requirements contained in the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program."
  3. The owner or operator of a budget source that does not have a NO<sub>x</sub> CEMS may request approval from the Department to use any of the following methodologies to determine NO<sub>x</sub> emission rate:
    - i. For a boilers or a turbine, the procedures contained in 40 C.F.R. Part 75, Appendix E, consistent with the provisions in the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program;"
    - ii. For a combustion turbine, a default emission factor as follows:
      - (1) For a gas-fired turbine, the default emission factor shall be 0.7 pounds NO<sub>x</sub> per MMBtu;
      - (2) For an oil-fired turbine, the default factor shall be 1.2 pounds NO<sub>x</sub> per MMBtu; or

- (3) For an oil-fired or a gas-fired turbine, a default factor equal to the maximum potential NO<sub>x</sub> emission rate of the specific source determined through testing conducted in accordance with a protocol approved by the Department; or
  - iii. For a boiler, a default emission factor as follows:
    - (1) 2.0 pounds per MMBtu; or
    - (2) A default factor equal to the maximum potential NO<sub>x</sub> emission rate of the specific source determined through testing conducted in accordance with a protocol approved by the Department.
- (k) The owner or operator of a budget source that does not have a flue gas flow monitor may request approval from the Department to use any of the following methodologies to determine the hourly heat input rate:
  - 1. Use a flow monitor and a diluent monitor meeting the requirements of 40 C.F.R. Part 75 and the procedures in Section 5 of Appendix F of 40 C.F.R. Part 75;
  - 2. For a source that combusts only oil or natural gas, use a fuel flow monitor meeting the requirements of Appendix D of 40 C.F.R. Part 75 and the procedures of Section 5 of Appendix F of 40 C.F.R. Part 75;
  - 3. For a source having a rated capacity of less than 25 MW that combusts only oil or natural gas, measure the fuel used on a frequency of no less than weekly and calculate the heat input rate on an hourly basis by apportioning the fuel based on electrical load in accordance with the following formula:
 
$$\text{Hourly heat input} = \frac{\text{Hourly electrical load} \times \text{Total heat input}}{\text{Total electrical load}}$$
  - 4. A budget source that combusts any fuel other than oil or natural gas, one of the following alternative methods:
    - i. Conducting fuel sampling and analysis and monitoring fuel usage;
    - ii. Using boiler efficiency curves and other monitored information such as boiler steam output; or
    - iii. Any other methods approved by the Department and which meet the requirements contained in the "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program."
- (l) The alternative methods for determining heat input in (k) above are subject to both initial and periodic relative accuracy, and quality assurance testing as prescribed by the "Guidance for

Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.” If the Department determines that the accuracy or reliability a method is not comparable to other approved methods, the Department may require that the use of the method be disallowed or discontinued or the Department may require the use of corrective factors to be included in the method. The Department shall not approve an alternative method for determining NO<sub>x</sub> emission rate requested pursuant to (j)3 above if the source has a NO<sub>x</sub> CEMS.

- (m) The hourly NO<sub>x</sub> emission rate in pounds per million Btu as determined in accordance with (j) above, and hourly heat input rate in MMBtu per hour as determined in accordance with (i) above, shall be multiplied to result in NO<sub>x</sub> emissions in pounds per hour and reported to the NETS in accordance with N.J.A.C. 7:27-31.16, Reporting requirements.]\*

**\*(h) As part of the monitoring plan submittal to the Department, the owner or operator of a budget source may petition the Department to use an alternative monitoring method to what is otherwise specifically applicable and specifically prescribed to a particular unit as indicated in the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program.” If the Department determines that the accuracy or reliability of a method is not comparable to other approved methods, the Department may disallowed the use of such method or may require the use of corrective factors to be included in the method. The Department shall not approve an alternative method for determining NO<sub>x</sub> emission rate if the source has installed or is required to install and operate a NO<sub>x</sub> CEMS. The Department will provide an opportunity for review by USEPA and other State environmental agencies before approving any alternative monitoring methods. The Department shall submit any approved monitoring plans containing alternative methods to the USEPA.\***

#### 7:27-31.15 Recordkeeping

The owner or operator of any budget source shall maintain for each budget source and for five years, a file of all measurements, data, calculations, and reports and other information required by this subchapter.

#### 7:27-31.16 Reporting

- (a) In order to allocate allowances pursuant to N.J.A.C. 7:27-31.7, Annual allowance allocation, the Department shall need to rely on information reported by the owners or operators of budget sources regarding the operation of the sources during May 1 through September 30 of the years 1996, 1997, and 1998. Therefore, the owner or operator of a budget source shall submit the following information, relating to the operation of the source during the May 1 through September 30 of the years 1996, 1997, and 1998 as follows:

1. \*[By (60 days after the operative date of this subchapter), the owner or operator of a budget source shall submit the information specified in (a)3 below for May 1 through

September 30, 1996 and for May 1 through September 30, 1997, to the Department at the address listed in (b) below;

2.]\* By October 30, 1998, the owner or operator of a budget source shall submit the information specified in \*[(a)3]\* **\*2\*** below for May 1 through September 30 \*[,]\* **\*periods for the years 1996, 1997, and\*** 1998, to the Department at the address listed in (b) below; and

\*[3.]\* **\*2.\*** The following information is required for each of the three years to be submitted for each source for each type of fuel burned on forms available from the Department at the address listed in (b) below:

- i. Information identifying the budget source and type of combustion unit;
- ii. The rated fuel capacity of the source (expressed in MMBtu per hour);
- iii. Whether a restriction on heat input or hours of operation exists, and if so, specify how much fuel or how many hours and specify the period of time for which the restriction applies;
- iv. For \*[the]\* **\*each\*** May 1 through September 30 period:
  - (1) For each type of fuel burned, the heat input, expressed in MMBtu; and
  - (2) For each type of fuel burned, the total actual NO<sub>x</sub> emissions, expressed in pounds;
- v. For each type of fuel burned, the most stringent applicable allowable NO<sub>x</sub> emission rate, expressed in pounds per MMBtu;
- vi. Any other information requested by the Department for allocating allowances pursuant to N.J.A.C. 7:27-31.7, Annual allowance allocation; and
- vii. Certification pursuant to N.J.A.C. 7:27-1.39.

(b) Information submitted to the Department in accordance with (a) above shall be mailed to the following address:

ATTN: NOX BUDGET PROGRAM  
New Jersey Department of Environmental Protection  
Office of Air Quality Management  
401 East State Street -- P.O. Box 418  
Trenton, NJ 08625-0418

(c) Within 30 days after the end of the \*[third]\* calendar quarter \*[of 1998]\* **\*in which monitoring systems are required to be installed and operated pursuant to N.J.A.C. 7:27-**

**31.14(c)\***, and within 30 days of the end of each quarter thereafter for data monitored using CEMS, and within 30 days of the end of each second and third calendar quarter thereafter for data measured or estimated using non-CEMS based methodologies, the authorized account representative for each budget source shall submit, in electronic format which meets the requirements of the USEPA's Electronic Data Reporting (EDR) convention, all information specified in;

1. The “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program” relating to emissions reporting, which includes but is not limited to:  
NO<sub>x</sub> emission in pounds per hour for every hour during the control period and the total  
NO<sub>x</sub> emission data for the quarter and the control period in pounds; and
2. The “Electronic Data Reporting: Acid Rain Program/NO<sub>x</sub> Budget Program -- Version 2.0” and the “NO<sub>x</sub> Budget Program Monitoring Certification and Reporting Instructions \*[,]\* \*.\*” \*[are incorporated herein by reference, as are any subsequent revisions thereto. These documents, which were prepared for the OTC were initially issued on July 3, 1997. Copies of these documents may be downloaded from USEPA Acid Rain Division’s world wide web page, at <<http://www.epa.gov/acidrain>>, or may be requested by writing to the following address:

ATTN: NOX BUDGET PROGRAM  
United States Environmental Protection Agency  
Acid Rain Division - Mail Code 6204J  
401 M Street SW  
Washington, DC 20460]\*

- (d) In order for the Department to obtain data necessary for the allocation of allowances pursuant to N.J.A.C. 7:27-31.7, in the quarterly EDR submissions to the NETS **\*for each third calendar quarter\***, the AAR for a budget source shall submit the following information for each budget source **\*[for each hour during the quarter,]\*** regardless as to whether the “Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program” specifies the reporting of the information:

1. The \*total heat input, expressed in MMBtu, to the source during the control period if the\* hourly heat input to the source\*[, expressed in MMBtu]\* **\*is not reported in the EDR;**
2. **\*-5. (Reserved.)\*** \*[The hourly gross electric output of the source, expressed in MW-hr;
3. The hourly gross useful heat output of the source, expressed in MMBtu;
4. The hourly net electric output of the source, expressed in MW-hr; and
5. The hourly net useful heat output of the source, expressed in MMBtu;]\*

- (e) After a budget source is permanently shutdown, the AAR for the source may obtain from the Department an exemption from the requirements pertaining to that source at N.J.A.C. 7:27-31.14, Emissions monitoring, N.J.A.C. 7:27-31.15, Recordkeeping, and N.J.A.C. 7:27-31.16, Reporting, in accordance with the following procedures:

1. To obtain an exemption, the AAR shall submit a written request to the Department for exemption at the address:

ATTN: NOX BUDGET SHUTDOWN  
New Jersey Department of Environmental Protection  
Office of Air Quality Management  
401 East State Street -- P.O. Box 418  
Trenton, NJ 08625-0418

2. A request for an exemption shall include identification of the budget source and the date of shutdown of the budget source;
  3. Upon verification that the source has been permanently shut down, the Department shall approve the request and shall send written approval of exemption from the requirements of N.J.A.C. 7:27-31.14, Emissions monitoring, N.J.A.C. 7:27-31.15, Recordkeeping, and N.J.A.C. 7:27-31.16, Reporting, pertaining to the source to the authorized account representative and the NETS Administrator. Such approval may contain conditions as deemed necessary by the Department; and
  4. If the Department verifies that the source has not been permanently shut down, the Department shall deny the request and shall send written notification of such denial to the AAR of the source.
- (f) The AAR of an account from which allowances were transferred pursuant to N.J.A.C. 7:27-31.10, Allowance use, transfer, and retirement, shall make available to the Department upon request information regarding the transaction cost of the transfer and the price received per allowance transferred.

#### 7:27-31.17 End-of-season reconciliation

- (a) After each control period, in accordance with the procedures in this section, the NETS Administrator shall conduct the end-of-season reconciliation, during which allowances, equal in emissions value to the source's emissions during the control period, are deducted from each budget source's compliance account.
- (b) No allowance may be used during the reconciliation process to satisfy current year compliance obligations if the allowance is identified with a serial number indicating that the first year it may be used is a future year.

- (c) For each budget source, the basis for a determination of compliance in the reconciliation process shall be the following:
  - 1. Monitored emissions data as reported by the budget source to the NETS Administrator, as reported to the NETS Administrator pursuant to N.J.A.C. 7:27-31.16 above, and as adjusted by the Administrator to be in accordance with N.J.A.C. 7:27-31.14, Emissions monitoring; and
  - 2. The balance in the compliance account of the budget source. This balance shall be the total number of allowances in the account as of the allowance transfer deadline after all applicable allowance allocations have been made and after all transfers have been recorded in the NATS.
- (d) No allowance that is in a general account, in a retirement account, or in a compliance account for another source shall be used to determine a budget source's compliance with the requirements of N.J.A.C. 7:27-31.3(i) during the end-of-season reconciliation process.
- (e) Each year during the period November 1 through December 31, inclusive, the authorized account representative may request the NATS Administrator to deduct allowances from the compliance account during the reconciliation process for that year's control period in a specific order. This request shall be submitted by the AAR to the NATS Administrator by no sooner than November 1 and no later than the allowance transfer deadline (December 31). In the request, the AAR shall identify the account number of the compliance account from which the deductions shall be made and the serial numbers of the allowances to be deducted in order of deduction.
- (f) If an AAR fails to submit a request pursuant to (e) above for the compliance account of a budget source, the NATS Administrator shall first deduct allowances with serial numbers indicating the current year in the order in which they were deposited into the account, then shall deduct banked allowances in the order in which they were deposited into the account.
- (g) The NATS Administrator shall reconcile allowances with the NO<sub>x</sub> emissions from each budget source as follows:
  - 1. If the NATS Administrator had announced that all banked allowances may be used on a one-for-one basis pursuant to N.J.A.C. 7:27-31.11(c)2i, then one allowance shall be deducted from each budget source's compliance account for each ton of NO<sub>x</sub> emitted from the source during the control period;
  - 2. If the NATS Administrator had announced that a certain proportion of banked allowances may be used on a one-for-one basis pursuant to N.J.A.C. 7:27-31.11(c)2ii:
    - i. First, one current year allowance shall be deducted from each budget source's compliance account for each ton of NO<sub>x</sub> emitted from the source during the control period until all NO<sub>x</sub> emissions are accounted for or until no current year allowances remain in the compliance account whichever occurs first;

- ii. Second, one banked allowance shall be deducted from each budget source's compliance account for each remaining ton of NO<sub>x</sub> emitted from the source during the control period until all NO<sub>x</sub> emissions are accounted for or until the number of banked allowances that are permitted to be used on a one-for-one basis are exhausted from the compliance account whichever occurs first; and
- ii. Third, two banked allowances shall be deducted from each budget source's compliance account for each remaining ton of NO<sub>x</sub> emitted from the source during the control period.

*\*[(AGENCY NOTE: Two alternatives are set forth below for paragraph (g)3. The Department will adopt one of these two alternatives. The Department requests comment as to which of these two alternatives is preferable.)*

**ALTERNATIVE 1 (HEAT INPUT)]\***

- 3. In addition to (g)1 or 2 above, for each opt-in source, if the actual heat input for the control period is less than the heat input used to determine the number of allowances created for the source pursuant to N.J.A.C. 7:27-31.4, then a number of allowances shall be deducted from the compliance account as determined in accordance with the following equation:

$$\text{Allowances} = \frac{E}{HI} \times (HI_B - HI) \times \frac{1}{2,000}$$

Where:

- E = The total NO<sub>x</sub> emission of the source during the control period, expressed in pounds
- HI = The total heat input to the source, expressed in MMBtu
- HI<sub>B</sub> = The average heat input used to calculate the number of allowances as determined at N.J.A.C. 7:27-31.4 \*[(i)1 or]\* (j)1, expressed in MMBtu
- 2,000 = The factor converting pounds into tons

**\*[ALTERNATIVE 2 (ENERGY OUTPUT)**

- 3. In addition to (g)1 or 2 above, for each opt-in source, if the energy output for the control period is less than the energy output during the period(s) used to determine the number of allowances created for the source pursuant to N.J.A.C. 7:27-31.4, then a number of allowances shall be deducted from the compliance account as determined in accordance with the following equation:

$$\text{Allowances} = \frac{E}{O} \times (O_B - O) \times \frac{1}{2,000}$$

Where:

- E = The total NO<sub>x</sub> emission of the source during the control period, expressed in pounds;
- HI = The total net energy output of the source, expressed in MW-hr;



$HI_B =$  The net energy output during the period used to calculate the number of allowances as determined at N.J.A.C. 7:27-31.4(i)1 or (j)1, expressed in MW-hr; and  
 $2,000 =$  The factor converting pounds into tons.]\*

- (h) The Department shall notify the holder of an account if it is determined that during the current year or in any preceding year, too many or too few allowances were allocated to an account, due to an error or due to reliance on data that has been subsequently shown to be inaccurate. For any such discrepancy, \*[provided that the holder of the account has been notified by December 1]\* **\*upon direction from the Department\***, the NATS Administrator shall deduct or add allowances to the account during the reconciliation process in order to eliminate the discrepancy. If allowances are to be deducted, the holder of the account is responsible for having sufficient allowances in the account by the allowance transfer deadline to cover the deduction. If allowances are to be added, and there are no current year allowances or allowances in an applicable reserve account available, the allowances the NATS Administrator adds shall be taken from the next year's base emission budget.
- (i) If during the reconciliation process, there are not enough allowances in a source's compliance account to satisfy the provisions of (g) and (h) above, the owner or operator of the budget source is subject to N.J.A.C. 7:27-31.19, Excess Emissions Deduction, and to penalties as set forth at N.J.A.C. 7:27A-3, Air Administrative Procedures and Penalties.

#### 7:27-31.18 Compliance certification

- (a) For each control period, the authorized account representative for the budget source shall submit to the Department an annual compliance certification.
- (b) The compliance certification shall be submitted no later than the allowance transfer deadline (December 31) of each year to the following address:

ATTN: NOX BUDGET COMPLIANCE CERTIFICATION  
 New Jersey Department of Environmental Protection  
 Office of Air Quality Management  
 401 East State Street -- P.O. Box 418  
 Trenton, NJ 08625-0418

- (c) The compliance certification shall contain, at a minimum:
  1. Identification of the budget source, including name, address, name of authorized account representative and NATS account number;
  2. A statement indicating whether emissions data has been submitted to the NETS in accordance with the procedures established in N.J.A.C. 7:27-31.16, Reporting, and in conformance with the requirements of the NETS Administrator;

3. A statement indicating whether sufficient allowances are held in the budget source's compliance account as of the allowance transfer deadline to properly account for the budget source's NO<sub>x</sub> emissions during the control period;
4. A statement indicating whether the monitoring plan which governs the budget source was maintained to reflect actual operation of the budget source;
5. A statement verifying that all **\*NO<sub>x</sub>\*** emissions from the budget source were accounted for, either through the applicable monitoring or through application of the appropriate missing data procedures;
- \*[6. A statement indicating whether there were any changes in the method of operation of the budget source or the method of monitoring the budget source during the current year;]\*  
and

\*[7.]\* **\*6.\*** Certification pursuant to N.J.A.C. 7:27-1.39.

- (d) The Department reserves the right to verify compliance by whatever means necessary, including but not limited to:
  1. Inspection of facility operating records;
  2. Obtaining information on allowance deduction and transfers from the NATS;
  3. Obtaining information on emissions from the NETS;
  4. Testing emission monitoring devices; and
  5. Requiring the budget source to conduct emissions testing under the supervision of the Department.

7:27-31.19 Excess emissions deduction

- (a) If through the reconciliation process pursuant to N.J.A.C. \*[7:27-31.16]\* **\*7:27-31.17\***, the NATS Administrator determines that there are not enough allowances in a budget source's compliance account to properly account for the emissions of that source during the control period, the NATS Administrator shall automatically deduct three allowances for each ton of NO<sub>x</sub> emitted for which no allowances were held as of the allowance transfer deadline.
- (b) A deduction, made pursuant to (a) above, shall occur when allowances are **\*first available in the compliance account. If allowances are not available at the time of reconciliation, the deduction will occur when allowances are\*** next allocated pursuant to N.J.A.C. 7:27-31.7 or when allowances are next transferred into the **\*compliance\*** account pursuant to N.J.A.C. 7:27-31.10.

7:27-31.20 Program audit

- (a) The Department shall conduct an audit of the NO<sub>x</sub> Budget Program in 2002 and every three years thereafter to ensure that the program is providing expected performance in regards to emissions monitoring and allowance use. Such audits shall include, as appropriate, confirmation of emissions reporting accuracy through validation of CEMS and data acquisition systems at the budget source, and review of allowance transfer and use by budget sources (geographically and temporally). Each periodic audit shall examine the extent to which use of banked allowances has, or has not, contributed to emissions in excess of the budget for each year preceding the audit. The periodic audit shall further provide an assessments to whether the effect of the program is consistent with the requirements for demonstration of reasonable further progress toward or the attainment and maintenance of the National Ambient Air Quality Standard for ozone.
- (b) As an alternative, in whole or in part, to the Department's conduct of an audit pursuant to (a) above, the Department reserves the right to request a third party audit of the program. Such third party audit could be implemented on a state by state basis or could be performed on a region-wide basis under the supervision of the Ozone Transport Commission.
- (c) If an audit results in one or more recommendations for revision of New Jersey's NO<sub>x</sub> Budget Program, the Department shall consider the audit recommendations, in consultation with the other participating jurisdictions in the OTR. If the Department determines that it is necessary or appropriate, the Department shall propose or recommend to the NATS and NETS Administrator the appropriate changes to current procedures.

**\*7:27-31.21 Guidance documents and sources incorporated by reference**

- (a) **The following documents are incorporated by reference in this subchapter, as are any subsequent revisions thereto:**
  - 1. **"Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program," issued by the Ozone Transport Commission, 444 North Capital Street, NW, Washington DC 20001, January 28, 1997;**
  - 2. **"Electronic Data Reporting: Acid Rain Program/NO<sub>x</sub> Budget Program -- Version 2.0," issued by the United States Environmental Protection Agency, July 3, 1997;**
  - 3. **"NO<sub>x</sub> Budget Program Monitoring Certification and Reporting Instructions," issued by the Ozone Transport Commission 444 North Capital Street, NW, Washington DC 20001, July 3, 1997; and**
  - 4. **"Measurement Protocol for Commercial, Industrial and Residential Facilities," issued by New Jersey's Board of Regulatory Commissioners on April 28, 1993.**

- (b) Copies of the documents listed at (a)1-3 above may be downloaded from USEPA Acid Rain Division's world wide web page, at <<http://www.epa.gov/acidrain/otc/otcmain.html>>. Copies of the documents referenced in (a) above may be obtained by sending a written request to the following address:

New Jersey Department of Environmental Protection  
Office of Air Quality Management - Rule Development Section  
401 East State Street - 7th floor  
P.O. Box 418  
Trenton, New Jersey 08625-0418

- (c) With respect to any revision of the documents incorporated by reference in (a) above, the Department shall:

1. Publish a notice in the New Jersey Register;
2. Provide at least 30 days for any interested party to submit written comment; and
3. Submit the revised reference to EPA for incorporation into the SIP\*

## CHAPTER 27A - AIR ADMINISTRATIVE PROCEDURES AND PENALTIES

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 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.

### CIVIL ADMINISTRATIVE PENALTY SCHEDULE

1. - 30. (No change.)

31. The violations of N.J.A.C. 7:27-31, and the civil administrative penalty amounts for each violation, are as set forth in the following table

Citation	Rule Summary	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
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N.J.A.C. 7:27-31.3(i)	Hold Allowances * <sup>[7]</sup> *	*[\$2,000]* *(Reserved.)*	*[\$4,000]* *(Reserved.)*	*[\$10,000]* *(Reserved.)*	*[\$30,000]* *(Reserved.)*
N.J.A.C. 7:27-31.13*[(i)]* *(g)*	Designate AAR	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-31.14(b)	Submit Monitoring Plan	\$1,000	\$2,000	\$5,000	\$15,000
N.J.A.C. 7:27-31.14(c)	Install/Operate Monitoring System	\$10,000	\$20,000	\$50,000	\$50,000
N.J.A.C. 7:27-31.14(c)	Certify Monitoring System	\$1,000	\$2,000	\$5,000	\$15,000
N.J.A.C. 7:27-31.14(d)	Install/Operate Monitoring System	\$10,000	\$20,000	\$50,000	\$50,000
N.J.A.C. 7:27-31.14(d)	Certify Monitoring System	\$1,000	\$2,000	\$5,000	\$15,000
N.J.A.C. 7:27-31.14(g)	Demonstrate Compliance	\$2,000	\$4,000	\$10,000	\$30,000
N.J.A.C. 7:27-31.14(h)	Monitoring	\$2,000	\$4,000	\$10,000	\$30,000
N.J.A.C. 7:27-31.15	Records	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-31.16(a)	Submit Information	\$300	\$600	\$1,500	\$4,500
N.J.A.C. 7:27-31.16(c)	Emissions Reporting	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-31.16(f)	Make Information Available	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-31.18(a) or (b)	Submit Compliance Certification	\$1,000	\$2,000	\$5,000	\$15,000

\*<sup>[7]</sup>For purposes of determining the number of days of violation, if any NO<sub>x</sub> emissions of a budget source for the control period in excess of the proper number of allowances authorizing such emissions as held in the source's compliance account at the allowance transfer deadline, then the Department shall presume that each day in the control period, which is 153 days long, constitutes a day in violation unless the owner of operator of the budget source demonstrates, to the satisfaction of the Department, that a lesser number of days shall be considered; and each ton of excess emissions is a separate violation.]\*

(n) - (p) (No change.)

Based on consultation with staff, I hereby certify that the above statements, including the Federal Standards Statement, addressing the requirements of Executive Order 27(1994) and N.J.S.A. 52:14B-

1 et seq., permit the public to understand accurately and plainly the purposes and expected consequences of this adoption. I hereby authorize the adoption.

\_\_June 17, 1998\_\_\_\_\_  
DATE

\_\_\_\_\_/s/ Robert C. Shinn, Jr.\_\_\_\_\_  
ROBERT C. SHINN, JR., COMMISSIONER

## NOX BUDGET ADOPTION DOCUMENT

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