BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PROPOSED NEW 35 ILL. ADM. CODE 217, SUBPART U,	)	
NOx CONTROL AND TRADING PROGRAM FOR	)	
SPECIFIED NOx GENERATING UNITS, SUBPART X,	)	
VOLUNTARY NOx EMISSIONS REDUCTION PROGRAM,	)	R 01-17
AND AMENDMENTS TO 35 ILL.ADM.CODE 211	)	(Rulemaking Air)

NOTICE

TO: Dorothy Gunn, Clerk
Illinois Pollution Control Board
State of Illinois Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601

Bobb Beauchamp
Illinois Pollution Control Board
State of Illinois Center
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SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the TESTIMONY OF LAUREL L. KROACK, RICHARD FORBES, AND DENNIS LAWLER; APPEARANCE; AND WITHDRAWAL OF AN APPEARANCE of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

Date: November 16, 2000

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: Robert C Sharpe

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THIS FILING IS SUBMITTED ON RECYCLED PAPER

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TESTIMONY OF LAUREL L. KROACK

My name is Laurel L. Kroack. I have been employed at the Illinois Environmental Protection Agency (Illinois EPA or Agency) since 1992 in the Division of Legal Counsel, Air Regulatory Unit, and participated in the development of today's proposal. I hold a Bachelor of Science degree from Kent State University and a Juris Doctorate from the University of Chicago Law School.

Background for the Proposal

This proposal is a companion proposal to two other proposals pending before the Pollution Control Board to collectively control the emissions of nitrogen oxides (NOx) in Illinois in order to meet the NOx emissions budget for the State established by USEPA in the so called NOx SIP Call. 63 Fed. Reg. 57355 (October 28, 1998). The proposed new Subpart W requires NOx controls for certain electric generating units (EGUs) and proposed new Subpart T requires NOx controls for certain cement kilns. See Subpart W, R01-9 and Subpart T R01-11, respectively.

Together with the two proposals discussed above and the future proposal for stationary internal combustion engines, this proposal will provide the total reduction in NOx emissions needed to meet the requirements of the NOx SIP Call, as explained below. Consistent with the

purposes of the NOx SIP Call, these reductions will meet the obligations of Illinois to reduce its impacts as an upwind state on downwind states attempting to meet the ozone NAAQS, while also providing the reductions that Illinois will need to attain the ozone NAAQS in the two multi-state nonattainment areas that included portions of Illinois.

The NOx SIP Call is the culmination of state and federal effort to address regional ozone nonattainment problems in Illinois and the eastern United States. Monitored ozone levels in the Lake Michigan area continue to exceed the national ambient air quality standard (NAAQS) despite significant efforts over the last 25 years on the part of the Agency and industry in Illinois to reduce emissions of volatile organic compounds (VOCs) within the state's ozone nonattainment areas and despite significant reduction in the number and degree of ozone exceedances. Modeling predicted that VOCs within the Chicago nonattainment area would have to be reduced at least 90% from 1990 levels in order for the area to attain. An extensive and sophisticated air quality field study performed by the States of Illinois, Indiana, Michigan, and Wisconsin through the Lake Michigan Air Directors Consortium (LADCO) revealed elevated levels of ozone entering the nonattainment areas at a height several hundred meters above the surface of the earth, even where surface monitors indicated compliance. Other areas of the country were making similar discoveries.

This common plight in the eastern half of the United States led to the formation of OTAG, an *ad hoc* committee formed by the Environmental Council of States (or ECOS), a national organization of states' environmental commissioners, and supported by the U.S. Environmental Protection Agency (U.S. EPA). Upwards of 1,000 representatives from 36 states and the District of Columbia, local governments, the United States Environmental Protection Agency (USEPA), the Federal Regulatory Energy Commission, industry, the environmental

community, and academia participated in OTAG. The Director of the Illinois EPA at that time served as Chairperson of OTAG, and Agency staff were very actively involved in the modeling study performed by OTAG and the investigation of control measures that would be appropriate to address ozone levels throughout this area. At the end of the two-year technical study, OTAG recommended to USEPA a range of control measures to reduce emissions of nitrogen oxides (NOx) in the multi-state region to address ozone transport and additional modeling analyses conducted on a subregional basis.

In October 1998, USEPA issued a final rulemaking requiring 23 jurisdictions in the eastern half of the U.S. to submit state implementation plans (SIPs) to reduce NOx emissions to address ozone transport. This rulemaking is commonly called the NOx SIP Call. In the SIP Call, USEPA relied upon OTAG's technical study as well as other technical studies performed by USEPA and other groups. Consistent with OTAG's recommendation, USEPA found that reducing NOx emissions on a regional basis, combined with VOC reductions in the nonattainment areas where necessary, presented the most effective means of addressing ozone transport. Reducing NOx on a regional basis meant that NOx must be reduced statewide, in both nonattainment and attainment areas, and even in states with no ozone nonattainment areas. Modeling analyses demonstrated that the cumulative reduction of NOx in the entire 23-jurisdictional region – as opposed to reducing emissions only in those states with nonattainment areas –would have a much greater benefit in reducing ozone in the nonattainment areas.

In the NOx SIP Call, USEPA established statewide budgets of NOx emissions for all jurisdictions subject to the NOx SIP Call, including Illinois. These budgets were based, in part, upon reductions from specified source categories where USEPA had determined control measures to be highly cost-effective. While the NOx SIP Call does not require the

implementation of the measures included in USEPA's analysis of highly cost-effective control measures, our examination of alternatives in Illinois led the Agency to the conclusion that requiring reductions from the specified source sectors -- large electrical generating units (EGUs), large so-called non-electrical generating units (non-EGUs)(*i.e.*, process steam stationary boilers, combustion turbines or combined cycle systems), cement kilns, and large stationary internal combustion engines, was the most effective and the only probable means of reaching the reduction levels required by the NOx SIP Call. The NOx SIP Call also establishes a cap on NOx emissions from large EGUs and from large non-EGUs if the state chooses to control those source sectors.

Finally, in the NOx SIP Call, USEPA promulgated the elements of a federal NOx Trading Program that provides for allocations of NOx allowances to emission units and allows Account Representatives to acquire NOx allowances from, or sell NOx allowances to, the Account Representatives of other units within the program to cover actual NOx emissions during the control period.[1] USEPA will administer the trading program for those states that incorporate the program by reference or adopt rules that are the same as the administrative portions of the federal trading program.

Subpart U and 40 CFR Part 96

To create the federal NOx Trading Program, USEPA promulgated 40 CFR Part 96 at the same time that it issued the NOx SIP Call. While Part 96 is a voluntary program, participation in it requires that certain portions of states' rules mirror Part 96 or incorporate the provisions of Part 96 by reference in order to guarantee parity among the participating states. At the same time,

[1] The control period is the period May 1 through September 30 of each year beginning in 2005, and for 2004, based on the ruling of the Court of Appeals for the District of Columbia Circuit (discussed infra), is May 31 through September 30 of that year.

there are important areas of flexibility available to participating states, including the methodology for allocating NOx allowances, whether to allow low-emitting NOx emission units (*i.e.*, those that emit less that 25 tons in the control period based on potential to emit) to opt-out of the trading program, how to distribute the Compliance Supplement Pool (CSP), a set of additional NOx allowances established by USEPA in the NOx SIP Call for each jurisdiction subject to the SIP Call for use in the 2003 and 2004 control periods, and whether to allow smaller emission units to opt-in to the federal trading program.

Proposed Subpart U provides for participation by the non-EGUs in the federal NOx Trading Program through incorporation by reference of certain segments of Part 96. This is consistent with Section 9.9 of the Environmental Protection Act (Act), where the General Assembly found that trading is a cost-effective means of obtaining NOx emissions reductions. The General Assembly also provided that the Agency propose and the Board adopt rules necessary to implement the federal trading program in Illinois, including incorporation by reference of those sections and subparts of Part 96 necessary to accomplish the General Assembly's findings.

Proposed Subpart U also contains those elements of Illinois' rule where USEPA provided flexibility to states participating in the federal NOx Trading Program, including NOx allowance allocation methodology; provisions for the set-aside of NOx allowances for new units, called the New Source Set-Aside or NSSA; distribution of the Compliance Supplement Pool (CSP), through "early" NOx reductions (in the 2001 and 2002 control periods); inclusion of the opt-out provisions for low emitters; and, provisions for allowing units not considered core sources (*i.e.*, non-EGU boilers and turbines with heat input greater than 250 million British thermal units) by USEPA in the SIP Call to opt-in to the trading program.

Incorporations by Reference and Elements of the Federal NOx Trading Program

Part 96 establishes a complete trading program, and states can incorporate the entirety of Part 96 if they choose, or they can incorporate only those portions that are necessary for the integrity of a national trading program administered by USEPA and adopt rules to cover the flexible portions of the rule. Part 96 applies to all states that choose to participate in the federal trading program. USEPA will administer the NOx Trading Program for all jurisdictions that may choose to participate.

USEPA has stated that certain elements of the program must be standard across the trading domain. These include the structure of trading accounts, the location of trading accounts, the requirement that each NOx emission unit have an Account Representative and that one Account Representative serve all units subject to the rules (called budget units) located at a single source. The federal rules also provide the method for deductions of NOx allowances for compliance; monitoring and reporting NOx emissions; banking NOx allowances; flow control of NOx allowances; and other elements. Those elements that are totally under USEPA's control do not need to be addressed in Illinois' rules other than through incorporation by reference. The Agency's proposal incorporates by reference the mechanics of the federal trading program, as described above. However, some of the elements of the federally administered trading program need to be addressed in Illinois rules to provide program consistency (*e.g.* permitting) and to provide an element of completeness to the proposal.

Part 96 allows budget units in all states that properly incorporate by reference or adopt the program itself into their own rules to freely trade with any other budget unit in the program, including those budget units in other jurisdictions. Part 96 defines EGU and non-EGU and requires that EGUs serving generators greater than 25 megawatts of electricity (MWe) and non-

EGUs greater than 250 mmBtu be included in the program. Part 96 refers to these as core sources. States may include more sources or small EGUs or non-EGUs in their programs, but they must include, at a minimum, the core sources.

Part 96 requires that each unit have one Account Representative and that only the Account Representative may act as the source's or emission unit's representative within the federal trading program. One Account Representative may represent more than one source or emission unit, however. Given the large number of participants in this program, having one Account Representative per source avoids placing USEPA, as administrator of the trading program, in the position of having to determine who has authority to act on behalf of a source or unit, especially in the case of disputes.

The Account Representative is required to establish a compliance account for each budget unit. The Account Representative may also establish an overdraft account for each source with multiple budget units. Anyone may have a general account and one does not need to own or operate a unit or be an Account Representative in order to open a general account. For example, the state will have a general account into which USEPA will deposit the allowances to be allocated to the sources in the state; environmental groups, brokers, and private citizens may also open general accounts.

The federal trading program allows for banking of allowances. Other than allowances from the Compliance Supplement Pool, these allowances do not have a fixed life and so could theoretically exist in perpetuity. However, the federal system allows for flow control to minimize the effects of withdrawals from the bank that could adversely affect the environment. If Account Representatives are accumulating allowances in bank accounts, then the total emissions in the trading domain in a given year are less than those allowed cumulatively by the

states' emission caps. However, with a trading system, the total emissions in a given state could exceed that state's cap, yet the units subject to the cap would be fully in compliance with the requirements of the program because of the trading element. Flow control is a mechanism to minimize exceedance of the domain-wide cap in the entire trading area because of the withdrawal of excessive banked allowances in one year.

When the total number of banked allowances in the entire trading domain exceeds 10% of the total number of allowances in the budget in the entire trading domain for a given control period, flow control is triggered. When flow control is triggered, USEPA will determine the ratio of 10% of the total budget to the total number of banked allowances. That is, USEPA will multiply the total trading budget for a control period by 10 and divide that product by the total number of banked allowances held in all accounts. The Account Representative of a unit may withdraw up to that percentage multiplied by the total banked allowances for that unit on a one for one basis. However, withdrawal of any allowances beyond the number determined by the ratio is permitted only on a two for one basis. Flow control does not restrict use of the allowances issued for the control period for which the flow control applies. For example, in 2008 a source may use the allowances issued to it for 2008 without restriction, even though flow control is in effect. If 10% of the total trading budget is 25,000 allowances and there are a total of 30,000 banked allowances in the trading system, the ratio would be 0.83. If it had 100 banked allowances in addition to its allocations for 2008, it could withdraw 8 of them without restriction. Allowances must be used in whole numbers; e.g., the unit may not withdraw 8.3 allowances. Conventional rounding applies. However, if the source needed to withdraw 15 allowances from its bank account in addition to those issued for use in 2008 in order to comply, it would have to

surrender 22 allowances: 8 allowances at one for one and 14 allowances to make up the additional 7, at the flow control "penalty" of two for one.

Another element of the federal program that is inflexible and that must be included in all participating states' programs is emissions monitoring pursuant to 40 CFR Part 75 and 40 CFR Part 96, Subpart H. Part 75 monitoring for all budget units ensures that a ton of NOx emitted, for example, in Georgia is equivalent to a ton of NOx emitted in Michigan and thereby assures the value of the currency of the trading program. Consistent with the requirements of Part 96, this proposal requires monitoring in accordance with the requirements of Part 75.

Part 75 requires 90% data capture, includes very stringent missing data requirements, and requires continuous emissions monitoring systems (CEM) for mass NOx emissions. At the same time, Part 75 does include alternatives to CEM in some instances and provisions for petitioning the Administrator of USEPA and the Agency for approval of alternative monitoring plans.

Part 75 also establishes how emissions are to be calculated. Each budget unit's emissions are to be reported to USEPA and the Agency quarterly, within 30 days following the end of the quarter, consistent with the requirements of Parts 75 and 96. This means that NOx emissions for the control period must be reported to USEPA and to the Agency for May and June by July 30 and for July, August, and September by October 30. Account Representatives have until November 30 following each control period to ensure that the compliance and/or overdraft accounts of the units for which they are responsible have allowances at least equal to the total number of tons of NOx emitted by each unit during the control period. If the number of allowances issued to the unit is insufficient to match its actual emissions, Account Representatives may obtain allowances from the marketplace to bring the unit's account into balance. On December 1 of each year, USEPA will withdraw allowances from a unit's

compliance account and then, if necessary, from the overdraft account available to the unit, if such an overdraft account exists. If the compliance and overdraft accounts do not contain sufficient allowances, then the unit would be subject to deductions of three future allowances for each ton of NOx emitted in excess of the number of allowances available in the unit's compliance or overdraft account as of December 1 of that year, a deduction on a 3-1 basis, as well as enforcement consistent with the Environmental Protection Act and/or federal enforcement through the SIP.

Part 96 allows low-emitting units to opt-out of the trading program. Such units may take federally enforceable permit conditions (referred to as a FESOP) limiting them to less than 25 tons of total mass NOx emissions during the control period. Only those units fueled by natural gas or fuel oil are eligible for low-emitter status. A state's source sector capped budget must be reduced by the number of tons of NOx included in the low-emitter's FESOP if the unit is an Appendix E unit or has ever been issued allowances by the state. If a low-emitter has never been issued allowances by the state, then the capped budget does not have to be reduced and the unit will be treated as a small non-EGU, not subject to the non-EGU budget, although it must demonstrate compliance with the cap on its emissions as established in its permit. Illinois has included the provisions for low-emitter status in this proposal.

Another optional feature of the federal trading program incorporated into this proposal is to allow sources that are not "core sources" under Part 96 to opt-in the program. As with low-emitters, if a state chooses to allow opt-ins, then it must follow the provisions for opt-ins contained in Part 96. Opt-in units must comply with Part 75 monitoring, establish a baseline, and then reduce emissions from that baseline.

Discretionary Features of Subpart U

Allocation Methodology

The allocation methodology included in the proposal is different from the optional allocation methodology included in Part 96 and different from the allocation methodology included in proposed Subpart W (NOx Trading Program for Electrical Generations Units), docketed with the Board as R01-9. States were granted flexibility in developing allocation methodologies and were not required to use the federal approach. This methodology was a major focus of the meetings held by the Agency with the Appendix E non-EGUs.

Unlike today's proposal, Part 96 provides that allowances will be issued for use in the control period three years in the future based upon application of a rate of 0.15 lb/mmBtu to the unit's heat input during the year prior to the year in which the allocations are made. Therefore, these allocations are based on the unit's heat input four years prior to the control period for which the allocations are made. For example, allowances for 2008 would be made in 2005 based upon the unit's heat input in 2004. Part 96 makes no distinction between non-EGUs that commenced operation before January 1, 1995 (*i.e.*, the Appendix E units) and units that commenced operation on or after January 1, 1995. While Part 96 does not provide any flexibility with regard to the prospective allocations of allowances (*i.e.*, it requires that allowances be allocated three years in advance of the season during which they may be used), it does allow for flexibility in how a state determines what those allowances should be.

The first major difference between Part 96 and the Agency's proposal is that it provides for fixed permanent allocations to the unit's listed in Appendix E. During negotiations, non-EGUs expressed a strong preference for permanent, fixed allocations, and presented the Agency with a proposed allocation of the non-EGU trading budget among the affected sources and units.

The Agency accepted the preference of non-EGUs for permanent, fixed allocations, after determining that there had been very few "new" non-EGUs constructed since January 1, 1995, and that the Agency had not received any applications for permits to construct these types of units during rule negotiations.

The Agency is proposing to allocate to existing non-EGUs (those that commenced commercial operation on or before January 1, 1995) permanent, fixed allowances, subject to an annual maximum new source set aside of 3%. These initial allocations to non-EGUs are listed in Appendix E of the proposed rule. The Agency will allocate the number of allowances provided in Column 5 to each non-EGU as listed for every three-year period of the program. Note that this number reflects withholding 3% of the total number of allowances available for distribution to "new units" as defined in proposed Section 217.668, discussed below.

Another difference between Part 96 and the Agency proposal is that the Agency has not proposed to base allocation of allowances for all budget units at the same NOx emission rate. The allocations in the proposed rule were negotiated among the non-EGUs and presented to the Illinois EPA as the agreed strategy for allocations. Unlike the EGUs, non-EGUs receive a permanent, fixed allocation. In discussions with the EGUs the Agency determined that they were indifferent on this issue as long as any "new" or existing units at non-EGU sources, even if they met the definition of an EGU, would not receive any allocation of allowances from the EGU trading budget. As a result, the proposed section on Applicability required another definition of "source" that mirrored the definition of "source" in the Clean Air Act Permit Program, or CAAPP, in Section 39.5 of the Act. This definition appears at proposed Section 211.6135. Thus, the proposal provides that any new unit constructed at a source listed on Appendix E, even if the unit would meet the definition of an EGU under proposed Subpart W (NOx Trading

Program for Electrical Generating Units), docketed with the Board as R01-9, would be classified as a non-EGU subject to Subpart U. Such units would not be entitled to receive an allocation under Subpart W.

New Source Set-Aside

Part 96 includes a NOx allowance set-aside for units that commence operation after January 1, 1995. The Agency has proposed a new source set-aside (NSSA) of 3% of each unit's fixed allocation for "new" units, i.e., units that commence operation after January 1, 2000.

Part 96 provides for distribution of the NSSA on a first-come/first-served basis. Further, new sources may attach allowances into the future. The Agency's proposal departs from Part 96 in these areas. The Agency's proposal requires new sources to apply for allowances by February 1st of each year for which they are requesting allowances. The Agency will review the applications and verify that each applicant is eligible for the number of allowances requested. New non-EGUs are eligible for allowances as follows: based on the more stringent of a 0.15 lbs/mmBtu emission rate or the unit's permitted limit, but no more stringent than a floor of 0.055 lb/mmBtu. By April 1, the Agency will notify new non-EGUs of the number of allowances they are eligible to purchase. If the requested number of allowances exceeds the number available for allocation, the Agency will pro-rate the allowances to all who have applied. If the number of allowances requested is less than the number available, each applicant will be allocated 100% of the number requested (and purchased) that they are eligible to receive. Any unused allowances in the NSSA will be allocated to the Appendix E sources pro-rata, to the extent whole allowances may be allocated. Any unused allowances or allowances that cannot be re-allocated to Appendix E units on a pro-rata, whole allowance, basis will remain in the state's general account until such

time as whole allowances may be re-allocated to the Appendix E units pro-rata or the allowances are purchased.

New sources must pay for the allowances issued to them from the NSSA. The price of those allowances is to be the average price paid for allowances on the market the previous control period. During 2004, the price will be the average price for NOx allowances in the Ozone Transport Region in 2003. Non-EGUs have objected to the creation of a new source set aside in Subpart U. They believe that any new units that will be constructed will meet the definition of an EGU under Subpart W, and either will be entitled to participate in the Subpart W trading budget or, if those units are constructed at a Subpart U source, they can demonstrate compliance through several means, without the need for a NSSA. For example, they can trade allowances among units at the source; make permanent allowance trades with other Subpart U units, or purchase allowances in the trading market. The Agency believes, however, that it is necessary to provide some pool of allowances that may, for a 3-year period, be purchased by any new non-EGUs that may be constructed after January 1, 2000. The Agency has agreed, however, to allocate any unused allowances from the NSSA to the Subpart U, Appendix E units pro-rata from the NSSA annually to the extent the Agency can allocate whole allowances. In other words, the NSSA will not build year to year to the extent unused, whole allowances can be allocated on a pro-rata basis. For example, if no allowances are allocated from the NSSA, the amount listed in column 5 of Appendix E will be allocated to those Subpart U units listed therein.

Compliance Supplement Pool

USEPA created a Compliance Supplement Pool of allowances in addition to those in the capped budgets for use by budget units only during the control periods of 2003 and 2004. Part

96 allows units to earn allocations of allowances from the Compliance Supplement Pool either by making early reductions during the 2001 and/or 2002 control periods or by demonstrating that the additional allowances are necessary to avoid potential electrical service reliability problems. States could choose to distribute the Compliance Supplement Pool allotted to them using either or both methods. The Agency proposes to distribute the Compliance Supplement Pool only on the basis of early reductions made by non-EGUs during 2001 and 2002, and also in 2003, but only to the extent allowances are not earned in 2001, and USEPA approves this provision.

Part 96 requires that units requesting early reduction credits (ERCs) have implemented the provisions of Part 75 monitoring during the control period prior to the control period for which they are claiming early reductions. This proposal contains this requirement.

Under this proposal, units requesting ERCs must reduce emissions 30% below the most stringent requirements applicable to the unit, such as the NOx levels required by an applicable federal New Source Performance Standard or limitations included in the unit's permit.

USEPA allotted 200,000 allowances to the Compliance Supplement Pool and then assigned them to the jurisdictions subject to the NOx SIP Call pro-rata, determined by each jurisdiction's relative trading budget. Of the allowances allotted to Illinois, no more than 2,427 have been reserved for non-EGUs. No more than half of these may be earned by units making early reductions during 2001. The Account Representatives of the units eligible for ERCs must apply for them by November 1, 2001, for those reductions made in 2001. By March 1, 2002, the Agency will verify eligibility and inform the Account Representative of the number of allowances that will be deposited in the account designated by the Account Representative prior to the 2004 control period, following receipt of payment for the ERCs. If the total number of ERCs for which units are eligible at the end of the 2001 control period exceeds 1,213, the

allowances to be distributed will be pro-rated. At least half of the ERCs reserved for EGUs may be earned in 2002 in the same manner as those earned in 2001. To the extent ERCs are not earned in 2001 or 2002, and USEPA approves this rule, ERCs may also be earned in 2003. Additionally, if any allowances reserved for non-EGUs are not used, they will be distributed pro-rata to eligible EGUs (those units subject to proposed Subpart W) prior to commencement of the 2004 control period.

Subpart X: Voluntary NOx Emission Reduction Program

This proposal also contains proposed revisions to Part 217, new Subpart X, to provide a voluntary emission reduction program to supplement the NOx allowances available to emission units subject to Part 217, Subparts U or W. These revisions meet the requirements of Section 9.9 (d) (3) of the Act requiring the Board, as part of the regulations implementing the NOx Trading Program, to adopt a regulatory proposal "to provide additional allowances to EGUs and non-EGUs to be allocated by the Agency".

These provisions provide a mechanism to reduce the cost to Illinois sources of complying with the SIP Call by allowing the scope of the available NOx reductions to expand to include reductions from additional sources. In this sense, it is intended as an enhancement of the market for NOx emission reductions for Illinois sources subject to the requirements and with the potential for reducing the overall costs of the control requirements under the SIP Call.

The General Assembly recognized that, to achieve this important goal, the provisions establishing this supplemental program must comport with the limitations and framework of the SIP Call and the general requirements for approval of a SIP revision. Thus, Section 9.9 (d) (3) also required that the voluntary reductions must be "verifiable, quantifiable, permanent, and federally enforceable." All of these elements are, in fact, necessary either to meet the general

requirements for an enforceable SIP and to fit within the administrative framework of the SIP Call. As will be seen below, the proposed revisions to Subpart X are carefully tailored to carry out these same purposes in order to ensure that the State obtains the benefit of these additional allowances for use by Subpart U or Subpart W sources in the NOx Trading Program.

In the proposed Section 217.805, the emission units eligible to provide voluntary reductions under this Subpart are limited to fossil fuel-fired sources permitted to operate prior to January 1, 1995, that discharge through a stack and are not already a SIP Call source (i.e., not subject to Subparts T, U, V or W) and do not meet certain other criteria specified in the rule. These provisions ensure that the voluntary reductions come from sources that would have a comparable emissions impact to those that would trade for these reductions and that the reductions are not just paper reductions. Non-EGUs have objected to limiting emission reduction units to those that commenced commercial operation prior to January 1, 1995. The Agency has included this provision because these units were included in the State's NOx budget and because Subpart X, essentially, is asking USEPA to recognize a budget shift in NOx emissions from those uncontrolled sectors of the statewide NOx budget to the trading budget for controlled sectors. The NOx SIP Call sets statewide NOx budgets based on a 1995 inventory, and requires each State to demonstrate that they have not exceeded this budget triennially, but it does not require controls or emission limitations on all NOx emitting sources, nor does it limit the construction of new sources of NOx. The Agency believes that in order to make the case that budget shifting should occur, outside of the opt-in provisions already included in the federal NOx Trading Program, limiting Subpart X to units that commenced operation before January 1, 1995, and therefore were included in setting the statewide NOx budget, is critical.

To participate in creating voluntary reductions, under the provisions of proposed Section 217.810, the owner or operator of a source must submit a NOx emission reduction proposal; request a cap on NOx emissions from all NOx units of the same type at the source which are not already subject to Subparts U or W; demonstrate how the emissions cap is to be determined; submit an emissions baseline determination for each unit subject to the cap; and meet certain specified permitting and monitoring requirements. Non-EGUs have objected to the emissions cap for similar units at the source because no such cap is placed on other units at sources that elect to opt-in to either Subpart U or W. The opt-in provisions of Subparts U and W, however, require that an opt-in unit must establish its emissions baseline for the purposes of allowance allocation by continuous emissions monitoring pursuant to 40 CFR 96, Subpart H, for a set period prior to opt-in, and must thereafter continue to monitor emissions pursuant to 40 CFR 96, Subpart H. Thus, shut down units would not receive allowances under the opt-in provisions of the federal NOx Trading Program. Subpart X units are not required to monitor emissions pursuant to 40 CFR 96, Subpart H, either before or after the reductions are made and NOx emission reductions from shut-down units are recognized by the Agency.

To help ensure that any voluntary reductions added to the trading pool further the purposes of the trading program, the methods to obtain these reductions are limited by proposed Section 217.815 to those meeting one of three sets of criteria. The reductions can be due to the use of any NOx emission reduction technology pursuant to federally enforceable permit conditions for the unit, provided that the NOx emissions for the emission reduction unit for any control period beginning in 2003 are lower than the unit's actual emissions in the 1995 control period. The reductions can also be ones resulting from a permanent shutdown after January 1, 1995, subject to an appropriate permit revision and certain other requirements. The final

reduction method is through a reduction in the NOx emission rate or hours of operation, if properly reflected in federally enforceable permit conditions and if the reductions are actual reductions measured from the actual 1995 control period NOx emissions.

The proposal contains specific provisions for calculating baseline and creditable NOx emission reductions. Pursuant to proposed Section 217.820, the 1995 control period actual emissions are determined by multiplying the unit's actual 1995 calendar year emissions as reported in its annual emission report (AER) by 5/12ths. If AER emissions numbers were not reported, other methodologies are provided as surrogates for the calculation. Calculations for shut down units are done in the same manner, pursuant to proposed Section 217.815. To the extent that the source creates verifiable, quantifiable and federally enforceable NOx emission reductions through federally enforceable permit conditions, and these reductions are recognized as part of the trading budget, the Agency will allocate 80% of these reductions to the units specified by the source making the reductions, and 20% will be retired for air quality. Allowances will be available for use in the control period following the control period in which they were obtained, subject to a certification annually that the reductions were obtained. Since USEPA administers the NOx Trading Program, they must recognize these reductions (i.e., increase the state's trading budget) in order for the Agency to make allocations for these reductions. All NOx allowances issued based on these reductions are limited by proposed Section 217.830 to an authorization to emit one ton of NOx in accordance with the NOx Trading Program in Subparts U or W, do not limit the authority of the U.S. or the State to terminate or limit the authorization, and do not constitute a property right.

The mechanics of the voluntary reduction system begin with a NOx emission reduction proposal pursuant to proposed Section 217.835, which contains detailed requirements for a

proposal, including identifying each emission unit, its baseline emissions, the amount of reductions, the emission cap that will apply and numerous other requirements needed to assure the integrity of the reductions. There are detailed requirements under subsection (c) for withdrawal of a proposal once made, including requirements for compliance certification, notification and other limitations.

Under proposed Section 217.840, once an emission reduction proposal is submitted, the Agency has 90 days to make a decision and inform the owner or operator in writing. If the Agency disapproves or conditionally approves a proposal, it must state the reasons in the notification. If granted, the proposal is not effective until the owner or operator obtains or modifies a permit with federally enforceable conditions incorporating the provisions of this Subpart. Corresponding requirements apply for the use of shut down emissions.

Proposed Section 217.845 contains the important requirement that the owner or operator of an emission reduction source demonstrate that it has obtained the NOx emission reductions specified in its approved emission reduction proposal and that it has not exceeded its NOx emission cap. It contains detailed provisions for how the amount of emission reductions are determined and requirements for submittal of an initial compliance demonstration plan, an initial emission test, a compliance certification and a performance evaluation for each CEMS.

Detailed requirements for emissions monitoring are contained in proposed Section 217.850, focusing on the use of CEMS. Reporting requirements are contained in proposed Section 217.855, requiring an owner or operator to report the total control period NOx emissions of each NOx emission unit subject to the cap as a seasonal component of its AER. It also requires reporting of performance test data and a performance evaluation for each CEMS. In proposed Section 217.860, there are detailed recordkeeping requirements.

The final section addresses enforcement. It provides in proposed Section 217.865 for certain administrative requirements for a source that has excess NOx emissions in any control period for which allowances have been issued. For the first such control period, the owner or operator must purchase an amount equal to two times the excess emissions; for the second such period, three times the amount must be purchased; and, for the third such period, four times the amount must be purchased and the emission reduction proposal revoked. In addition, penalties and injunctive relief are available for any of these violations of this Subpart.

Some of the non-EGUs have also objected to the provisions throughout Subpart X that provide that the Agency will allocate allowances only for those NOx emission reductions that are recognized by USEPA. As stated previously, these provisions, or similar provisions, are necessary because USEPA, and not the Agency, determines the amount of each State's NOx Trading Budget. Since allowance allocations (except for the new source set aside under both Subpart U and W) are made 3 years in advance, if USEPA did not recognize the reductions, allocations by the Agency for Subpart X reductions would be taken from the State's unadjusted trading budget, in effect coming from the amount reserved for the NSSA and opt-in units.

Conclusion

The Agency believes that the Subpart U proposal addresses the requirements of the federal NOx Trading Program and provides a fair approach to address the concerns of the non-EGUs. The Agency also believes that the Subpart X proposal addresses the requirements of Section 9.9(d)(3) of the Act and is drafted in a manner that is not inconsistent with the proposed Federal NOx Trading Program.