

**PUBLIC HEARING TESTIMONY BEFORE THE ILLINOIS POLLUTION  
CONTROL BOARD ON BEHALF OF DOMINION GENERATION ON 35 ILL.  
ADM. CODE 217 SUBPART W: THE NOx TRADING PROGRAM FOR  
ELECTRIC GENERATING UNITS**

**September 15, 2000**

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Good morning/afternoon. I am Lenny Dupuis, Manager – Environmental Policy for Dominion Generation. Dominion is a fully integrated, investor owned electric and gas energy provider headquartered in Richmond, VA with power generating facilities located in Illinois, Virginia, West Virginia, North Carolina, Ohio and Pennsylvania.

I am here today to discuss the proposed 35 ILL. ADM. Code 217 Subpart W: The NOx Trading Program for Electric Generating Units, and Amendments to 35 ILL. ADM. Code 211 and 217, which have been submitted for your approval by the Illinois EPA (IEPA) to address the Agency's obligations to submit a state implementation plan (SIP) complying with the statutory requirements of Section 110(a)(2)(D) of the Clean Air Act (CAA) to address the interstate transport of NOx emissions, commonly referred to as U.S. EPA's NOx SIP Call. IEPA also envisions using the Subpart W rule as a means to achieve attainment of the National Ambient Air Quality Standard (NAAQS) for ozone in the Metro-East St. Louis nonattainment area and the Lake Michigan/Chicago nonattainment area, and has submitted the rule to U.S. EPA for pre-approval and review prior to actual adoption by the State in support of an attainment demonstration which must be submitted to U.S. EPA by December 2000.

This rule will require electric generating units in Illinois to significantly reduce ozone season NOx emissions to comply with emission budgets set by U.S. EPA based on a 0.15 lb/mmBtu limit. For our two, 600-mw Kincaid units, which under the current Clean Air Act Amendments (CAAA) Title IV-Phase II rules are required to meet a 0.86 lb/mmBtu annual NOx emission rate, this will involve the installation of expensive control technology.

Dominion fully recognizes the pressure the State is currently facing given the deadlines imposed upon them to develop and submit a plan to address EPA's NOx SIP Call by late October 2000, and attainment demonstration plans for the Metro-East St. Louis and the Lake Michigan/Chicago nonattainment areas by

December 2000. We fully support the environmental goal of attaining the ozone standard in Illinois and elsewhere, but firmly believe that the most constructive, cost-effective and flexible means should be used to achieve this goal. It is with these principles in mind, that Dominion offers the following comments and suggestions regarding the proposed Subpart W rule.

The Subpart W rule, as currently proposed, will require control measures needed to comply with the NOx SIP Call budget to be in place for affected sources in Illinois by May 1, 2003. On August 30<sup>th</sup>, the U.S. Court of Appeals in the DC Circuit issued an order extending the compliance date associated with the NOx SIP Call from May 1, 2003 until May 31, 2004. Therefore, in terms of meeting its obligations under the Section 110 NOx SIP Call, there is no longer a basis for the State to require compliance with the SIP Call by May 2003. Implementation of the Subpart W rule will impose the SIP Call level of reductions upon sources in Illinois some 13 months earlier than will be required of sources in surrounding states subject to the SIP Call rule, which could at least temporarily place the State of Illinois at an economic disadvantage relative to its neighboring states. Furthermore, such "premature" implementation will place an undue hardship on some sources where such a requirement is not warranted.

Prior to the U.S. Court of Appeals March 3<sup>rd</sup> decision upholding the merits of EPA's NOx SIP Call rule, the State was on a course of action directly addressing the local nonattainment issues in the Metro-East St. Louis and the Lake Michigan/Chicago nonattainment areas. The IEPA put forth a framework for an attainment strategy based on a regional, statewide 0.25 lb/mmBtu rate-based control level in lieu of EPA's NOx SIP Call emissions cap. Extensive air quality modeling performed by the state in cooperation with the Lake Michigan Air Directors Consortium (LADCO) and submitted to U.S. EPA in its attainment demonstration plan, indicates that attainment can be achieved in the Metro-East St. Louis area with the rate-based 0.25 lb/mmBtu ozone season limit for sources in Illinois and in eastern Missouri. The IEPA provided testimony in this regard to the Board on August 28<sup>th</sup> and provided a summary of these modeling results in its submittal of the rule to the Board. While the modeling indicates that the rate-based 0.25 strategy gets the Chicago area very close to attainment, it does suggest that additional local or regional controls may be necessary to achieve compliance with the ozone standard in the Chicago nonattainment area. We note, however, that there appears to be a minimal impact in predicted ozone concentrations in the Chicago nonattainment area in moving from the 0.25 lb/mmBtu strategy to the NOx SIP Call level of emission controls.

The Metro-East St. Louis nonattainment area must achieve compliance with the ozone standard by November 15, 2005. Given this deadline, it is reasonable for the State to require controls by May 1, 2003 in order to obtain the necessary NOx reductions to improve air quality during the three ozone season prior to November 2005 (because of the nature in which compliance with the ozone standard is measured) in order to attain the standard. However, the Agency's

technical modeling analysis indicates that the SIP Call level of controls currently proposed by IEPA in its Subpart W rule is not needed in order to achieve attainment in the St. Louis area. Since the attainment deadline for the Chicago area is November 2007, there is no basis to require controls more stringent than the 0.25 lb/mmBtu level prior to the May 31, 2004 SIP Call deadline to address either the St. Louis or Chicago nonattainment problem.

For these reasons, Dominion suggests that this Board urge the IEPA to amend its Subpart W rule to reflect the Court ordered May 31, 2004 deadline for compliance with EPA's NOx SIP Call requirements. (There are other elements of the Subpart W that we also believe should be amended, and we will address these issues later in this testimony.) We further suggest that the Subpart W rule be removed from the attainment demonstration plans for the St. Louis and Chicago nonattainment areas, and recommend that IEPA move forward with a rate-based 0.25 lb/mmBtu control requirement for the 2003 ozone season if the State determines reductions during the 2003 ozone season are needed. This approach would adequately address the St. Louis nonattainment problem while not subjecting sources in Illinois to a more stringent level of control earlier than is required of sources in other surrounding states subject to the NOx SIP Call. This approach would also provide sources in Illinois additional time to install the control equipment necessary to achieve the very stringent reductions required by the NOx SIP Call.

The IEPA has already begun developing a rate-based 0.25 lb/mmBtu rule for electric generating units in the state, but abandoned the effort following the U.S. Court of Appeals March 3, 2000 decision upholding the NOx SIP Call. Since this rule has not been completed at this time, Dominion reserves the right to provide comment on such a rule if IEPA decides to resurrect this effort.

There also remains some continued uncertainty with respect to EPA's NOx SIP Call rule. Several of the states that have legally challenged the SIP Call rule in the U.S. Court of Appeals, including some states within which Dominion owns and operates generation facilities, have indicated their intent to file a *writ of certiorari* in the U.S. Supreme Court. The petitioning states have been granted an extension for filing *cert.* until October 20, 2000. In addition, industry and labor groups have filed a motion in the U.S. Court of Appeals – DC Circuit requesting a review of EPA's March 2, 2000 Technical Memorandum which contains the basis for the state-specific NOx budgets established in the NOx SIP Call rule. We ask this Board to recognize this continued uncertainty and the possibility that the SIP Call rule could still be overturned before allowing the Agency to proceed any further with the incorporation of the Subpart W control strategies in its attainment demonstration plans. We believe IEPA should amend its earlier attainment plan submittal to U.S. EPA, in which it sought a pre-approved review of the Subpart W rule, and should, at least at this time, pursue an attainment demonstration plan for the Metro-East St. Louis and the Lake Michigan/Chicago nonattainment areas that is independent of the Subpart W rule. Should the NOx SIP Call survive

these legal challenges, IEPA can then use the Subpart W rule, along with the SIP Call reductions in surrounding states subject to EPA's rule, as part of its attainment strategy for the Lake Michigan/Chicago nonattainment area which has until November 2007 to comply with the ozone standard.

In addition to amending the compliance deadline for the Subpart W rule to May 31, 2004, Dominion believes there are additional changes that this Board and IEPA should consider making to the currently proposed rule to allow affected sources as much flexibility in meeting the reduction requirements as possible. We urge IEPA and this Board to consider the following points and recommendations:

The Subpart W rule should allow allocation of the full budget described in the rule for the 2004 ozone season in spite of the May 31<sup>st</sup> compliance deadline. The SIP Call rule, as currently promulgated, provides that the state's SIP must "require full implementation of all control measures by no later than May 1, 2003" (40CFR § 51.121(b)(1)(ii)). Dominion believes that by virtue of the Court's order extending the deadline to May 31, 2004, § 51.121(b)(1)(ii) should now be read as requiring implementation of such measures by May 31, 2004, which means that the state SIP provide that the control measures needed to satisfy the state-specific ozone season NOx budgets be in place by May 31, 2004. Therefore, as long as NOx emitted from the sources in the state subject to the SIP Call rule does not exceed the total budget number set for the affected sources in the 2004 ozone season, compliance with the statewide budget established for the affected sources is achieved. There is therefore no need for the budget to be adjusted to account for the May 31 compliance date for the 2004 ozone season. Furthermore, since the amount of electric generation and therefore NOx emissions that occur in the month of May are typically less than each of the summer months, a relatively small portion of the budget would likely be consumed during May 2004 anyway. Accordingly, if IEPA is compelled to adjust the budget to reflect a four-month ozone season in 2004, we would urge the Board to instruct the Agency to adequately account for the intra-seasonal generation and emission patterns in a reasonable manner and not simply reduce the budget by 20%.

In its proposed form, the Subpart W rule provides the opportunity for sources to earn early reduction credits (ERC's) from a "compliance supplement pool" (CSP), established by U.S. EPA under the SIP Call rule, by achieving emission reductions prior to the rule's current May 1, 2003 compliance deadline. The ERC's are to be allocated on a tonnage basis off a baseline emission rate that is 30% below year 2000 levels (Title IV - Phase II NOx level for most units affected by the rule) for such reductions achieved during the 2001 and 2002 ozone seasons. The total number of ERC's that can be awarded over the two-year period, however, are limited by the amount of available allowances in the state's compliance supplement pool (IEPA will award 15,261 ERC's from the total state CSP of 17,688 tons to electric generating units (egu's) and the remaining ERC's to non-egu sources). IEPA intends to award no more than 7,630 of the egu CSP

allowances for reductions made in the 2001 ozone season and 7,631 of the CSP allowances plus whatever is left over from 2001 for reductions made during the 2002 ozone season. Sources must apply for the ERC's by November 1<sup>st</sup> of the year during which the ozone season reductions were achieved. IEPA will award the ERC's by May 1<sup>st</sup> of the year following the ozone season during which the reductions were achieved. If the total amount of requested ERC's exceed the total number of allowances available in the CSP, source-specific allocations will be awarded/issued on a pro-rata basis. Thus, there is the possibility that sources will not receive full credit for all of the reductions made below the designated baseline emission rate (30% below year 2000 levels). In other words, there is no guarantee that early reductions below the designated baseline will yield equivalent emission credits. In addition, it is possible that sources will not have assurances that ERC's have been obtained (or that enough ERC's have been obtained) by the beginning of the ozone season for which compliance with the emission budgets is required, making it "risky" and difficult to adequately incorporate the use of these credits for compliance strategy planning purposes for which the CSP allowances were designed. Furthermore, ERC's can be applied/used for compliance in the 2003 and 2004 ozone seasons only; unused credits are then permanently retired. These provisions are overly restrictive and not acceptable.

Dominion appreciates U.S. EPA's recognition (at least to some degree) of the difficulty that utilities will face in having to retrofit a number of units in a short time frame in order to comply with the SIP Call reductions and EPA's subsequent creation of the CSP. We further appreciate IEPA's incorporation of early reduction credits and the CSP into the Subpart W rule. However, we believe that some of the provisions governing the generation and use of ERC's currently embedded in the EPA SIP Call rule and in IEPA's Subpart W rule limit the usefulness of these credits and may actually discourage source owners from installing and operating control technology earlier than required. There are several means we would urge the Board and IEPA to consider that would provide added incentive for source owners to generate early emission reductions.

First, given the extension of the compliance deadline for the SIP Call to May 2004, the ability to generate early reduction credits should be extended through the 2003 ozone season. If an interim statewide 0.25 lb/mmBtu requirement during the 2003 ozone season is implemented to address the Metro-East St. Louis nonattainment problem, any reductions below this required level should qualify as early reduction credits during the 2003 ozone season. This would encourage reductions beyond the 0.25 lb/mmBtu level during the 2003 ozone season. The reduction credit baseline for the 2001 and 2002 ozone seasons, however, should remain at the 30% below Title IV levels already established in the rule.

Second, there is no absolute requirement that the States adopt the compliance supplement pool provisions within their rules. We would ask the Board and IEPA

to consider developing an early reduction credit program independent of EPA's CSP that would not limit the number of early reduction credits that could be achieved. Removing such a limitation while at the same time providing an "up-front" guarantee that early reductions will be rewarded in the form of "equivalent" emission credits will greatly enhance the incentive for source owners to install and operate control technology earlier than required.

Third, we would ask IEPA and the Board to consider allowing ERC's to be banked for use anytime in the future ("infinite" banking), or in the alternative to consider extending the "lifetime" for ERC's to at least the 2007 ozone season which is the actual year that the SIP Call rule requires states to comply with the overall SIP Call budget numbers.

Fourth, should IEPA be compelled to retain the provisions of the Subpart W rule that allocate ERC's from the U.S. EPA's compliance supplement pool, we urge the Agency to amend the rule to extend the use of the ERC's through the 2005 ozone season, given the extended deadline for compliance with the SIP Call reductions to May 31, 2004. This would at least maintain "status quo" in the rule, which at this time (assuming a May 2003 compliance deadline) allows the use of ERC's for two ozone seasons (2003 and 2004) beyond the compliance deadline. Section 217.770 Subpart E of the current rule allows such an adjustment to be made and would be consistent with the basis for the Court-ordered extension, and we urge the Board to allow such an adjustment.

In its currently proposed form, the Subpart W rule incorporates the banking provisions of EPA's model rule. Under the model rule provisions, banked allowances as well as ERC's awarded from the compliance supplement pool are subject to a flow control mechanism beginning in the 2004 ozone season. Dominion believes that given the limitations already imposed upon the generation, use and lifetime of ERC's obtained from the CSP, these ERC's should not be subject to additional flow control. We note that in U.S. EPA's 40 CFR Part 97 rules implementing the Federal NOx Trading Program, which EPA intends to implement in states which become subject to a Federal Implementation Plan (FIP) or are subject to the Section 126 rule, EPA is not subjecting ERC's allocated from the CSP to flow control and is not implementing the banking provision flow control mechanism until the 2005 ozone season when the ERC's have all been used or retired. Dominion urges this Board and the IEPA to do the same; that is, do not subject the ERC's to flow control and amend the rules to delay the implementation of the flow control mechanism in the banking provisions at least until the ERC's from the CSP have been used up or retired. This would make the trading program more compatible with the Federal NOx Trading Program, which would minimize inconsistencies and facilitate the administration of an effective multi-state trading system. We believe that U.S. EPA would not object to this alteration of the model rule provision since the Agency applied the concept in its Part 97 rule.

In developing the state-specific NOx trading budgets for the electric generating unit (egu) sector, U.S. EPA attempted to account for the estimated/potential increase in utility electric generation between the baseline year (1996 for Illinois) and the effective year of the NOx budget (2007). To accomplish this, EPA applied a growth factor adjustment to the baseline year (1996) ozone season heat inputs (utilization) to project an ozone season utilization for the budget year (2007) for each unit, then applied a uniform 0.15 lb/mmRtu NOx emission rate limit to compute unit-by-unit components that were converted to NOx tons and totaled for all affected egu's in the state. The growth factors used by EPA were calculated from the application of an electric generation forecast model called the Integrated Planning Model (IPM). EPA used the model to project state-by-state egu summer heat inputs for the years 2001 and 2010, then calculated a 9-year growth rate and pro-rated the 9-year rate to 11 years to produce a "surrogate" growth rate over the period 1996 to 2007 for each state.

During the course of the SIP Call rulemaking, EPA published three different versions of the growth factors which varied appreciably from version-to-version and state-to-state. For example, the growth factor projected by EPA for Illinois was 1.23 in the October 1997 Proposed Rulemaking for the SIP Call rule, was increased to 1.34 in the Supplemental Notice of Proposed Rulemaking issued in May 1998 and then decreased significantly to the current 1.08 in the final SIP Call rule promulgated in October 1998. Thus, at one point during the SIP Call rulemaking process, the EGU budget for Illinois was as high as 37,950 tons. In the final set of growth factors, state-by-state factors ranged from a low of 0.47 (a negative growth rate) for Rhode Island to a high of 1.59 for Massachusetts. The disparity in growth assumptions from state-to-state directly results in substantial differences in the amount of "growth tonnage" added on to the baseline emissions. Again, for example, applying Illinois' 8% growth factor to the 1996 baseline utilization and applying a 0.15 lb/mmRtu limit yields a 2007 budget of 30,701 tons. Yet the exact same baseline tonnage in Massachusetts would yield a 2007 budget of 45,199 tons.

EPA's growth rate methodology assumes that the "IPM-projected" growth rates over the 2001 to 2010 period are representative of growth experienced in the earlier years of the 1996-2007 SIP Call budget period that is not addressed by the IPM projections (1996-2001). In many cases, growth as measured by utilization, has already exceeded the 2007 projections U.S. EPA used to set the state NOx emission budgets. For example, making these budgets in these states more restrictive than if U.S. EPA had used more representative growth rates. Kincaid has already exceeded EPA's projected 2007 utilization estimates by approximately 25% as of the 1999 ozone season. This gross underestimation of growth in setting the NOx emission budgets directly affects the ultimate emission rate a given utility system will have to meet to comply with the seasonal allocations provided under the state NOx budget. For states where EPA has significantly underestimated growth, the "effective" emission rate to comply with the budget will be much lower than 0.15 lb/mmBtu. For example, Kincaid will

have to achieve a NOx emission rate well below the 0.15 lb/mmBtu rate assumed by EPA in deriving the NOx budgets in order to comply with the seasonal NOx allocations in Appendix F of the Subpart W rule if the units are to continue operating at levels experienced over the last several ozone seasons.

U.S. EPA claims that the regional trading program will mitigate these flaws and discrepancies. However, EPA set individual state budgets that individual states must meet; it did not set a regional 22-state budget. Therefore, EPA's methodology has subjectively set certain states as potential net buyers of allowances and others as potential net sellers of allowances. Sources in states such as Illinois where EPA has underestimated growth should not be forced to spend their money on purchasing emission allowances. In addition, states with larger growth rates are provided better flexibility for incorporating new sources into the budget, which in turn provides those states with an economic advantage over other states with lower growth rates such as Illinois.

As previously mentioned, several industry groups have petitioned for a review of the state-specific NOx budgets U.S. EPA has established in the SIP Call rule in the U.S. Court of Appeals - DC Circuit for some of the very same reasons described above. The briefing litigation schedule was recently set by the Court, and a decision from the Court is not expected until the second quarter of next year (2001) at the earliest. This ongoing legal review presents the possibility that the SIP Call budgets could be rejected by the Court and/or remanded back to EPA for further consideration and review. Therefore, the total NOx budget for electric generating units (30,701 tons) referenced in the Subpart W rule may at some point in the future need to be adjusted pending the outcome of the litigation. The IEPA has incorporated a provision in the Subpart W rule, Section 217.760 (c) that allows the Agency to adjust the state budget should U.S. EPA adjust the trading budget for any reason. Dominion believes that this provision should be specifically tied to the ongoing litigation of the budgets, which if successful, in our opinion will increase the budgets in Illinois.

Dominion believes that IEPA should reexamine the allocations established for the Appendix F sources for the initial three-year control period (currently 2003-2005). We believe that a more equitable approach would be to adopt a methodology similar to that used by US EPA in the Part 97 rule (Federal NOx Trading Program), which bases the allocations for each unit on the average of the two highest ozone season heat inputs over a multi-year period, adjusted by normalizing the total state egu tonnage so obtained with the state egu budget established by EPA in the SIP Call rule. EPA's Part 97 rule used the 1995-1998 period; we would advocate using the 5-year period 1995-1999 since 1999 CEMs data have been submitted to EPA under the Acid Rain program. This approach would alleviate disadvantages created for units that operated at lower capacity levels during the baseline year used to determine the budgets relative to other, recent years, and allow all affected units the same flexibility in the allocation determination process. Under the currently proposed methodology, such



"disadvantaged" units will be required to meet emission rates much more stringent than the 0.15 lb/mmBtu limit (assumed by EPA in calculating the budget), curtail operation or secure (purchase) additional allowances in order to comply with the emission cap. This is important because under the "fixed-flex" approach used to allocate allowances for the subsequent two-year allocation periods (currently 2006-07 and 2008-09) retain a portion of these initial allocations, and the affected Appendix F units are thus not actually subject to a "common" allocation methodology until the year 2010.

In closing, Dominion commends the IEPA for its efforts in allowing affected stakeholders the opportunity to provide meaningful input through face-to-face meetings and written comment throughout the development of the Subpart W rule. In addition, we commend IEPA and the other LADCO states for their extensive modeling efforts over the past several years. The Board should be aware that it was precisely this cooperative, subregional modeling framework that the Ozone Transport Assessment Group (OTAG) envisioned and recommended states in the OTAG region undertake to determine the levels of controls needed to address the ozone transport problem. We urge the Board to rely on and expand upon these efforts to arrive at a workable regulatory program in Illinois that provides meaningful environmental benefits and maximum flexibility to achieve environmental goals in a cost-effective manner that does not place undue economic burden upon affected industries in the state.

Thank you for this opportunity to comment.