Before the ILLINOIS POLLUTION CONTROL BOARD

Testimony of
J. Derek Furstenwerth

Leader, Air Resources Division, Environmental Department
Reliant Energy, Incorporated
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IN THE MATTER OF:

PROPOSED NEW 35 ILL.ADM.CODE 217,
SUBPART W, THE NO_x TRADING PROGRAM
FOR ELECTRICAL GENERATING UNITS,
AND AMENDMENTS TO 35 ILL.ADM.CODE
211 AND 217.

R01-09
(Rulemaking, Air)

My name is Derek Furstenwerth, and I am a Leader in the Air Resources Division of the Environmental Department of Reliant Energy, Incorporated. Reliant Energy is an international energy services and energy delivery company based in Houston, Texas. Reliant Energy owns and operates over 26,000 megawatts of power generation in the U.S. and Western Europe. In Illinois, Reliant Energy began operation this summer at its 345 megawatt facility in Shelby County and has under construction an 870 megawatt peaker plant in Aurora. As a result, Reliant Energy will be impacted by the final NO_x Trading Rule regulations promulgated by the Illinois Pollution Control Board. We appreciate the opportunity to present this testimony.

As you are aware, the electric industry is in the process of being deregulated. Because of uncertainty regarding the shape that deregulation would take, there was little investment in new power generation facilities in the United States in the late 1980s and the 1990s. As a result, there is now a shortage of generation capacity during periods of peak electric demand. In response to this shortage, and the passage of Illinois' deregulation law, there has been a significant amount of activity in the siting of electric power generation facilities in Illinois in the last two years.

Work on the proposed Illinois NOx Trading Rule began in 1998, after the US EPA issued the NO_x SIP Call, which ordered states in the eastern US to develop NO_x Trading Rules as a cost-effective way to ensure that ozone nonattainment areas in the eastern US would reach attainment. This SIP Call occurred prior to the current period of significant electric generation development in Illinois. As a result, the proposed rule developed by the IEPA contains a number of provisions that do not accurately reflect the present marketplace of generating facilities in the state.

These new market entrants are part and parcel of the development of the infrastructure within the state of Illinois that will allow the current economic expansion in the state to continue. Moreover, the facilities being built generally have significantly lower NO_x emissions than older generating units in the state. In effect, the proposed rule insulates older generating sources from

having to install pollution control equipment and forces potential new sources to compete for an insufficient amount of NO_x allowances available to them under the provisions of the proposed rule. Surely one quality of a successful NO_x Trading Rule would be to reduce NO_x as cost-effectively as possible while allowing the continued development of the new, clean, efficient generation the state needs to foster continued economic growth. To this end, Reliant Energy suggests four substantive changes to the proposed Illinois NO_x Trading Rule.

1. USEPA's Model Rule allowance allocation methodology should be applied beginning in 2006.

In general, the proposed Illinois NOx Trading Rule is modeled after USEPA's Model Rule. The Model Rule was issued as part of the NO_x SIP Call to provide states a template upon which to build their own state budget rules. The proposed Illinois NOx Trading Rules uses many of the concepts from USEPA's Model Rule, but strays from the Model Rule approach in several ways. The allocation methodology is one area in which the NO_x Trading Rule differs from the Model Rule.

Both the Model Rule and the proposed Illinois NO_x Trading Rule allocate a fixed number of allowances to existing sources for the first three years of the program. These allocations amount to 95 percent of the total state NO_x Budget, and the remainder of the budget resides in the New Source Set Aside, which is discussed in greater detail later in my testimony. Facilities receiving fixed allocations in 2003 through 2005 are listed in Appendix F of the proposed Illinois NO_x Trading Rule, and for the purposes of this discussion, will be referred to hereafter as "Appendix F sources." Only sources in operation prior to 1995 are listed in Appendix F. In other words, from 2003 through 2005, sources which began operating after 1994 will receive no fixed allocations, but will instead be allocated allowances from the New Source Set Aside.

In USEPA's Model Rule, beginning in 2006, all existing sources (including those built after 1995) are allocated allowances based on their historical heat input (fuel use) multiplied by a target NO_x emission rate of 0.15 lb/mmBtu. The purpose of this calculation approach is to allocate allowances to sources in the state based on their level of operations – more operations, more allowances. Conversely, the less a source operates, the fewer allowances it receives. Bear in mind, however, that the state's NO_x budget is fixed. If more sources are built in the state, or older sources are operated more than they were historically, individual allocations are reduced for all sources. As a result, as more new, clean sources begin operating in the state and as older sources operate more to meet increased demand, all sources receive a smaller "piece of the pie."

The Illinois NO_x Budget Rule differs from the Model Rule in two significant ways at this point. One is discussed here and one is discussed in my second comment. While the Model Rule allocates NO_x allowances beginning in 2006 based on historical operations, the proposed Illinois NO_x Trading Rule utilizes what IEPA describes as a "fixed-flex" allocation methodology for allowance allocations from 2006 through 2009. In 2006 and 2007, Appendix F sources receive 80% of their fixed allocation amount, regardless of their historical operations. Sources not listed in Appendix F, on the other hand, receive their allocations based on historical operations from the left over 20 percent of the state budget. These allocations are then reduced by 20 percent. If any allocations remain, they are divided among all sources according to historical operations. In

2008 and 2009, Appendix F sources receive 50% of their fixed allocations, again regardless of historical operations. Non-Appendix F sources receive 50% of the allocation to which they would be entitled based on historical operations. Any remaining allowances are again divided among all sources based on historical operation.

The net result of this is to lock non-Appendix F sources out of the majority of allowance allocations for the first 7 years of the program. This will force newer sources, which are already the cleanest in the state, to force technology to unprecedented levels to control NO_x emissions to within their allowance allocations or attempt to buy additional NO_x allowances in the marketplace. Existing sources, meanwhile, can simply stockpile allowances from the early years of the program, delaying the implementation of controls for many years, even though these controls may be more cost-effective than incremental controls on the newer, cleaner sources. As a result, newer, cleaner sources will be discouraged from locating in Illinois, at a time when such facilities are needed to provide cheaper and more reliable electricity to the state.

In order for a market-based NO_x control rule to work, the NO_x allowance allocation scheme must reflect the historical operations of the sources affected by the rule. The "fixed-flex" allowance allocation scheme runs directly counter to this precept. Accordingly, Reliant Energy recommends that the proposed Illinois NO_x Trading Rule be revised to apply the Model Rule allowance allocation methodology beginning in 2006, rather than delaying this methodology until 2010.

2. NO_x allowances should be allocated to all sources based on a target emission rate of 0.15 lb/mmBtu.

Another important difference in allocation methodology between the Illinois NO_x Trading Rule and USEPA's Model rule lies in the disparate treatment of Appendix F sources and newer sources with respect to emission rates. The Model Rule allocates allowances to all affected sources based on historical operations multiplied by 0.15 lb/mmBtu NO_x. These allocations are then prorated to all sources to ensure that the total allocations do not exceed the state NO_x budget. The result of this is to allow NO_x reductions to be made most cost effectively by installing controls on the sources best-suited to such controls and allowing lesser controls on other sources. For example, one unit may be particularly well suited to installing pollution control equipment and another may not. In effect, this approach rewards the lowest emitters, because any allowances they receive above their actual emissions level can be either used at other sources owned by the same owner, or sold on the market to recoup some of the costs of installing controls. This is another central concept in a market-based emission control rule.

The proposed Illinois NO_x Trading Rule differs from the Model Rule in its treatment of non-Appendix F sources. As noted above, the Model Rule allocates allowances to all sources based on a target emission rate of 0.15 lb/mmBtu. The proposed Trading Rule, on the other hand, only proffers this treatment to Appendix F sources. Newer, cleaner sources are allocated allowances based on their permitted NO_x emission limits, which are much lower than 0.15 lb/mmBtu. In fact, current emission limits for new units are approaching one tenth of that level. Here is an example of the disparity thus created:

Source A began operating in 1960. Source A consumes 10 million mmBtu's of fuel in the baseline period. As a result of the NO_x Budget Rule, Source A was equipped with pollution control equipment that reduces NO_x to 0.05 lb/mmBtu. Source B began operating in 2000. Source B also consumed 10 million mmBtu of fuel in the baseline period. Source B has NO_x emissions of 0.05 lb/mmBtu. Under the proposed rule, Source A would receive 750 NO_x allowances, while Source B would receive 250 NO_x allowances.

In effect, Source B is penalized for being built after 1995. Consider also the fact that the source built in 2000 is almost certainly much more efficient than the source built in 1960, and the imbalance of this approach becomes even more pronounced. In this way, the proposed Trading Rule provides another barrier to the new electric generation facilities Illinois needs, and rewards older, less efficient units simply for being older. Reliant Energy strongly recommends that all existing units be allocated allowances based on a target emission rate of 0.15 lb/mmBtu.

3. The New Source Set Aside (NSSA) should be maintained at 5% of the total state NO_x budget for the life of the program.

The current proposal reduces the size of the New Source Set Aside to 2% of the total NO_x budget beginning in 2006. This will further limit the allowances available to new sources wishing to locate in Illinois, raising additional barriers to economic development. The New Source Set Aside is the pool of allowances which is used to provide allowances to new sources until they have been operating long enough to enter the main program.

This recommendation is consistent with the Illinois Pollution Control Act, which stipulates 5% of total state NO_x budget as the maximum size of the NSSA Other states have maintained the New Source Set Aside at 5% of the total NO_x budget in order to encourage continued economic development. In fact, New Jersey has a New Source Set Aside equal to 10% of the state NO_x budget.

4. IEPA should not charge a fee for withdrawals from the New Source Set Aside

The IEPA has proposed to charge a fee equal to the "market index price" for each NO_x allowance allocated from the New Source Set Aside. The proceeds from these fees are then returned to "Appendix F" sources. In effect, this further increases the cost of doing business in Illinois for new sources, but provides very little return to help sources in the main program offset pollution control costs.

The New Source Set Aside is simply a mechanism to provide allowances to new sources until they have operated for long enough to enter the main program. No fee is charged for allowance allocations in any other part of the program. There is no benefit for charging a fee to a source simply because they are in this interim program. Furthermore, Reliant Energy is unaware of any other states that are proposing to charge for withdrawals from the New Source Set Aside.

In summary, the proposed Illinois NO_x Trading Rule, with some important changes, should provide for clean air in the state by balancing the interests of existing generation facilities with those of new entrants to the electric generation market. Reliant Energy appreciates the opportunity to provide input on this important topic, and we are prepared to answer any questions the Pollution Control Board may have regarding our comments.