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STATE OF ILLINOIS
Pollution Control Board

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PROPOSED NEW 35 ILL. ADM. CODE 217,)
SUBPART W FOR ELECTRICAL GENERATING) R01-9
UNITS, AND AMENDMENTS TO) (RULEMAKING-AIR)
35 ILL. ADM. CODE 211 AND 217)

TESTIMONY OF AMEREN CORPORATION

My name is Michael Menne and my title is Manager of the Environmental, Safety and Health Department, Ameren Services Division of Ameren Corporation. I am based at the Ameren corporate offices in downtown St. Louis, Missouri and I am responsible for providing guidance and developing strategies for environmental compliance throughout the Ameren system including compliance with air pollution control requirements. My staff and I have followed the development of NOx control regulations at both the state and national level for the past several years. In my testimony today, I would like to commend the Agency for its efforts and to state Ameren's position in support of the proposal to the extent that it is being done to meet the requirements of the NOx SIP Call and to raise relatively minor issues with respect the language of the proposal.

First, however, I would like to describe briefly Ameren and its facilities in Illinois. Ameren Corporation is the St. Louis based holding company formed by the 1998 merger of Union Electric ("UE") and Central Illinois Public Service ("CIPS"). Ameren has two generating subsidiaries which will be affected by this rule: AmerenUE, a regulated company which operates the power plants formerly run by Union Electric, one of which is located in

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Illinois; and Ameren Electric Generating Company ("AEG"), a deregulated company which currently operates plants exclusively in the State of Illinois.

Ameren has six large generating stations in Illinois, burning a variety of fuels including coal, oil and natural gas, with a total generating capacity of nearly 3,300 megawatts. These are identified as EGUs under this proposal and are listed in Appendix F. These are primarily base load facilities which provide electricity for central and southern Illinois homes and businesses. Ameren has also installed over 600 MW of new peaking capacity in Illinois over the past two years, and is planning several additional units which may be located within the state. As such, Ameren should be viewed as a company representing both extensive existing units and a significant number of new units that will be affected by this rule.

I wish to note for the record, that Ameren has been acknowledged as a leader in NO_x control accomplishments at our coal-fired generating stations. Beginning in 1991, Ameren began a series of research projects and installed advanced combustion control technologies on several generating units. Our continuing commitment and goal to achieve the lowest possible NO_x emissions on these units has resulted in unprecedented success. For the year 1999, Ameren operated the lowest NO_x emitting large coal-fired generating unit in the country and six out of the ten lowest emitting units in the nation. Our work with the Electric Power Research Institute, in applying new technologies on one of our cyclone-fired boilers - a boiler with particularly high NO_x emissions - has resulted in achieving the lowest NO_x emitting cyclone coal-fired unit in the nation, and earned the company the Governor's Pollution Prevention Award in Missouri for 1998. We are currently working to install these technologies

on our other Ameren generating units, including our largest units in Illinois, and also **planning** to install additional new innovative technologies on our Illinois units within the next two years.

I wish to express our appreciation for all the hard work that the Illinois EPA staff has given to this process. I was contacted by the Chief of the Bureau of Air over three years ago, when he began a collaborative effort of working with the utilities and other industries in Illinois to develop a NO_x control program. This rule represents the most stringent and costly air pollution control requirement in the history of the operation of our existing generating units. I believe the Agency knew this going into this process, and knew this would be a difficult and **contentuous regulation**. We **have** discussed the issues with other generators in the state and have attempted to arrive at consensus positions with the IEPA. While we do have certain issues with the IEPA's approach as we describe below, we believe the IEPA worked hard to seek the participation of stakeholders and to provide consensus solutions to these difficult problems. Ameren commends the TEPA for its hard work in developing this proposal and its thoroughness in presenting its proposal to the Board and the public.

In our opinion, we were very close to arriving at a consensus on an approach to a utility NO_x control regulation in Illinois which would have achieved the air quality benefits of this proposed rule at much less cost. This approach would have required all EGUs in the state to meet a 0.25 lbs NO_x/mmbtu emission rate, hereafter referred to as the 0.25 rule. The 0.25 rule would have required most existing generating units to reduce NO_x emissions 40% - 75% below current, already reduced, NO_x emission levels, and at significant costs. **However**, the intervention of the USEPA in issuing the NO_x SIP Call requiring today's proposed regulation prevented the Agency from moving forward with that alternative.

In general, if it is deemed necessary that Illinois adopt a rule which meets the requirements of the USEPA's NO_x SIP Call, Ameren generally supports Subpart W of Part 217. Yet the Board must understand that the record presented in this proceeding does not support the adoption of this regulation to meet the attainment demonstrations for either the Metro East/St. Louis or Lake Michigan non-attainment areas in the absence of the SIP call. It is clear from the information presented by the IEPA and other available information that the attainment demonstrations can be made without the stringent standards and requirements imposed in this proposed regulation and that those standards and requirements are justified only to comply with the SIP call. Furthermore, we believe the continuing air quality modeling work being conducted by LADCO, and other organizations will show that 0.25 rule for Illinois as well as for other states in the Midwest could have satisfied not only the attainment demonstrations for Illinois but also the interstate transport issue which the NO_x SIP Call is intended to address.

A number of states and industry groups are planning to petition the U.S. Supreme Court on the NO_x SIP Call. If the SIP Call is subsequently overturned, the Board would not be justified in imposing these regulations to meet the attainment demonstrations. As Mr. Kaleel testified, the modeling demonstrates that the 0.25 rule would achieve attainment for Metro East St. Louis and would probably achieve attainment for the Lake Michigan area. Additionally, as stated by Mr. Kaleel, implementing the NO_x SIP Call provides only " . . . limited benefits (generally 1-3 ppb)" in the Lake Michigan area over the 0.25 rule. The costs of achieving the .15 lb/mmbtu cap and trade standard imposed by the SIP Call and this regulation will be extremely high for numerous reasons. To name one, the growth factor selected by the USEPA for setting the Illinois NO_x budget is absurdly low. In 1998, Ameren and several other utilities in Illinois

were already exceeding the generating capacity that USEPA predicted would not be achieved until 2007, based on its growth analysis. As a result, the control level Illinois EGUs will have to achieve is far lower than the initial .15 lb/mmbtu standard used as the basis of this proposed regulation.

The Board should also understand the tremendous costs these rules will impose on EGUs, and appreciate the difference in costs between the 0.25 rule and this proposal. As I have stated, Ameren has pursued the development of new, low cost NO_x control technologies over the past nine years. To meet the NO_x control requirements of the current acid rain provisions and a 0.25 rate-based rule, AEG will have spent approximately \$30 million and have reduced NO_x emissions by about 12,000 tons equivalent to a 62% reduction. This results in a cost of about \$2,200 per ton of NO_x removed. On the other hand, AEG will need to spend an additional \$100 million to get an additional 15% (or approximately 2,800 tons) reduction to meet the initial requirements of this program based on the emission cap with limited or very little growth. This marginal reduction is roughly equivalent to \$8,200 per ton of NO_x removed. Overall, AEG expects to spend approximately \$130 million to comply with Subpart W which equates to a cost of \$5,300 per ton of NO_x removed. This number significantly exceeds the number calculated by the IEPA in Dick Forbes' testimony or the number used by the USEPA in determining that its SIP Call requirements were "highly cost effective." These costs are based on our experience in installing NO_x control technologies and actual bids by suppliers to retrofit the technologies on our AEG units. These costs are also supported by a study performed by H. Zinder & Associates (to be released shortly) where the costs of meeting a 0.25 rule and the NO_x SIP Call were evaluated for the eastern U.S. This study shows that the costs of compliance with a 0.25 rule is

50% higher than the costs cited in Mr. Forbes' testimony on compliance costs associated with the NOx SIP Call. Additionally, costs for compliance with the NOx SIP Call were shown to be more than twice that of EPA estimates.

It is Ameren's understanding that the IEPA will propose the 0.25 rule if the SIP Call is overturned. The IEPA so indicated in its Statement of Reasons in submitting this proposal and has so indicated in its discussions with the electrical generators. Ameren would like to be assured of this outcome. There is simply no justification for this cap and trade proposal absent the SIP Call.

Ameren also believes that the allocation of allowances included in the proposal is fair and should be adopted by the Board. Given the unfair budget imposed by the USEPA, there are far fewer allowances than potential generating capacity, but we believe that the Agency's approach fairly balances the public and private interests and provides an equitable division of allowances among the competing parties. While the bulk of the allowances are initially reserved for existing EGUs, this is necessary since most of these are the base load units which provide the necessary system reliability to ensure that Illinois consumers continue to receive a consistent and reliable supply of power. Many of these facilities represent substantial investments in the communities which they serve and provide ongoing and long term economic benefits to those communities.

In deliberations over the allowance allocations provided in this rule, operators of new units have argued that their facilities are much cleaner, low emitting facilities that should be encouraged by the Agency, and thus, should receive a greater portion of the allowances. The existing units, however, will be required to expend exorbitant costs to retrofit their facilities to

meet this proposed rule. Further, while the rule properly allocates set allowances to current base local EGUs during the first three years of the program to assure system reliability, that certainty quickly vanishes. Because this rule caps NO_x emissions throughout the state, and many new generating and industrial facilities are planned in Illinois, the proposal's fixed/flex provisions continually reduces those NO_x emissions for existing facilities. New sources will need to install the best available NO_x control technologies in any event pursuant to BACT and LAER and may be forced to use the open market to secure NO_x allowances to cover their operations. Existing units have to operate with the uncertainty over how many allowances they will receive in future years. They will be given fewer allowances over time and must plan on additional controls and retrofits, the degree of which is uncertain. The continually ratcheting down of allowances for existing units has the potential to jeopardize the viability of operating some units with their current fuel supply in the future.

Many allowance allocation alternatives were debated in the course of the development of this rule. Since Ameren is an owner and operator of both existing units, new units and planned additional units in the future, we may not agree that the method proposed in the rule is the best for our planned operations, but we believe the Agency has chosen a scheme to accommodate all types of facilities in the fairest manner possible.

Another area of debate in the proposed rules is the Early Reduction Credits (ERCs). This is especially true with the recent U.S. District Court order to extend the compliance deadline for the SIP Call rules until May 31, 2004. As the Agency discussed in the first hearing, this could result in changing the years in which ERCs may be earned from 2001 - 2002 to 2002 - 2003. ERCs are extremely valuable to the existing units in the State, because

they provide time for the development and installation of new, innovative and possibly less costly control technologies, and also provide the time necessary to install and start up the most expensive and long - lead time control technologies, such as Selective Catalytic -Reduction.

Again, there is a very limited number of ERCs available. Under the proposed rule, half of the ERCs will be made available for early reductions in 200 1, and the other half in 2002. We believe the Agency should stick with this schedule, but allow the ERCs to be used in 2004 and 2005 (assuming compliance with the rule is also extended until 2004) and not “slide” the years for which ERCs can be earned. Our logic is as follows. First, we fully expect that the pool of ERCs will be oversubscribed, thus companies will be pro-rated the amount of ERCs they can earn. This results in considerable uncertainty as to the amount of ERCs any given company might be able to obtain, thus reducing the ability of a company to know what controls will be needed to comply with the rule during the 2004 (and presumably the 2005) ozone season. Delaying all or part of the distribution of ERCs will result in a greater over-subscription of the pool, and will thus increase this uncertainty and penalize those companies which have expended considerable time and cost to reduce emissions at an early date.

Second, during the development of the Federal NOx SIP Call, it was always assumed that ERCs could be earned in 2001 and 2002. To delay this schedule would be a major setback in the achievement of early air quality improvements and the scheduling of NOx control projects planned for EGUs. Since Ameren is the owner and operator of several large existing units, it is simply not practical to install technologies on many units over a short time frame. While we have been working to reduce our NOx emissions for several years, this effort requires extensive lead times and scheduling unit down times to install these technologies over our

system. We also do not believe that one or two pollution control projects at any one site should consume a major portion of the available ERCs in any one year. To get the most air quality benefit from the largest variety of sources without significant penalties to early NO_x reduction plans, we firmly believe the Agency should keep the original ERC baseline and schedule for obtaining ERCs as proposed in the rule without the date adjustment provisions.

Ameren is also concerned with the schedule in the proposed rule to issue the ERCs in May of 2002 for ERCs earned in 2001 and in May 2003 for ERCs earned in 2002 although the CEMs data on which the ERC application is based will have been submitted by October 30 of the prior year. This gives a company very little time to know what ERCs may be counted upon for compliance. Since ERCs will be calculated using CEM information, it should be possible for the Agency to determine quickly what ERCs have been earned and prorated to a given company. The Agency will determine allowances for new units within 30 days and there seems to be no reason for a six month period for determining ERCs. We urge the Board to encourage the Agency to accelerate this schedule. This is another reason for not extending the schedule to earn ERCs. How can a company plan to comply with the rule in 2004, if they do not know how many ERCs they are prorated until just a few months before the compliance deadline? By keeping the schedule to earn ERCs in 2001 and 2002, companies will have some assurance of the ERCs they can count on to help comply with the rule. This is necessary in order to plan the timing of control project expenditures and maintain reliable generating capacity. Once again, for all the above reasons, we strongly encourage the Agency to keep the schedule and 50/50 split of ERC opportunities in the years 2001 and 2002.

We are preparing selected revisions to the proposal for the Agency's review.

These address several issues which we raised in our questions to the Agency at the first hearing.

These include changes to clarify the permitting process, the process for adjusting the allowance and liability provisions. We will work with the Agency to achieve consensus on these revisions and will then present them to the Board.

Thank you for allowing us to present this testimony and I will be happy to answer any questions.