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Parker McCollough
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John W. Fainter, Jr.
President and CEO

Walton Baum
Board Secretary

December 2, 2005

Ms. Karen Hill
Texas Commission on Environmental Quality
P. O. Box 13087 (MC - 206)
Austin, Texas 78711

Re: Preliminary comments of the Association of Electric Companies of Texas relating to the much more stringent nitrogen oxides emissions limits TCEQ is considering imposing on electric generating units in East Texas

Dear Ms. Hill:

The Association of Electric Companies of Texas (AECT) appreciates the opportunity to submit these preliminary comments as part of the stakeholder process relating to the much more stringent nitrogen oxides (NO_x) emissions limits the TCEQ is considering imposing on electric generating units (EGUs) in East Texas (as defined in 30 TAC § 101.330(10)). AECT notes that such EGUs account for approximately 84% of the electricity generated by fossil fuel-fired EGUs in Texas. AECT reserves the right to submit supplemental comments.

AECT is a trade organization representing electric companies in Texas. Organized in 1978, AECT provides a forum for member company representatives to exchange information on their industry, and to communicate with state and federal governmental officials.

A. Background

It is AECT's understanding that the TCEQ is considering the development of rules that would impose on EGUs in East Texas the very stringent NO_x emissions limits that are applicable to EGUs in the Houston/Galveston non-attainment area (approximately 0.03 lb/MMBtu for gas-fired EGUs and 0.05 lb/MMBtu for coal-fired EGUs), or significantly more stringent NO_x emissions limits (0.01 lb/MMBtu for gas-fired EGUs and 0.03 lb/MMBtu for coal-fired EGUs). The TCEQ staff's stated purpose for the possible imposition of such more stringent NO_x emissions limits would be to help the DFW non-attainment area reach attainment with the 8-hour ozone standard.¹

¹ At the November 18 stakeholder meeting, TCEQ staff presented modeling data predicting that the stringent NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would result in what staff believes

B. Executive Summary

The TCEQ has not provided legally adequate justification for either set of possible NO_x emissions limits AECT understands it is considering imposing on EGUs in East Texas, or for that matter, for any NO_x emissions limits that are more stringent than the current limits. As a result, AECT strongly opposes both sets of NO_x emissions limits the TCEQ is considering.

The TCEQ has not presented adequate technical or scientific justification that the imposition of any more stringent NO_x emissions limits in the parts of East Texas outside of the DFW non-attainment area, much less the very stringent NO_x emissions limits the TCEQ is considering imposing, would result in a reduction in the 8-hour ozone design value in the DFW non-attainment area that is necessary to bring the area into attainment with 8-hour ozone standard. The data from the TCEQ's 8-hour ozone monitoring in the DFW non-attainment area, the SIP modeling the TCEQ has conducted relative to the NO_x emissions limits it is considering, and the airplane monitoring data do not provide adequate technical or scientific justification, either individually or collectively, for the stringent NO_x emissions limits being considered. AECT believes that the 8-hour ozone design value reduction needed to bring the DFW non-attainment area into attainment will be achieved only by requiring NO_x and VOC emissions reductions from sources, especially mobile sources, off-road sources, and other area sources, in that area.

Even if the TCEQ could provide technical and scientific justification that further NO_x emissions reductions in East Texas would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, the TCEQ should not impose the stringent NO_x emissions limits on EGUs in East Texas until it first considers and uses the NO_x emissions reductions that will be achieved by the Clean Air Interstate Rule (CAIR) and other NO_x emissions rules or commitments, and unless it also imposes comparable NO_x emissions limits on non-EGUs in East Texas.

There would be significant technical problems with EGUs in East Texas achieving the NO_x emissions limits the TCEQ is considering. In addition, the imposition of such NO_x emissions limits would have a staggering negative impact on the economic viability of such EGUs and of the Texas mining industry, which, in turn, would result in a staggering negative impact on Texas citizens and business and the entire Texas economy. Furthermore, EGU owners/operators would not be able to achieve the NO_x emissions limits within the required timeframe.

would be a significant reduction in the 8-hour ozone design value in the Tyler/Longview/Marshall area. AECT notes that use of such data to support imposition of the stringent NO_x emissions limits would be inappropriate because the Tyler/Longview/Marshall area is currently in attainment with the 8-hour ozone standard.

The stringent NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would jeopardize the TCEQ's ability to comply with Governor Perry's Executive Order RP-49, which requires steps be taken to encourage fuel diversity in electricity generation, which helps to keep electricity prices lower, and to discourage baseless delays in the issuance of permits for new EGUs. Such NO_x emissions limits would also jeopardize the state's ability to address the electricity price and availability concerns discussed in the September 7, 2005 letter from the Texas Public Utility Commission (PUC) Chairman to TCEQ Chairman White.

In light of the above-described very significant concerns with the stringent NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas, the TCEQ needs to slow down the rulemaking process and take a more deliberate and studied approach, so that it can fully and properly address the above-described concerns.

- C. The TCEQ has not presented adequate technical, scientific, or legal justification that the imposition of any more stringent NO_x emissions limits in the parts of East Texas outside of the DFW non-attainment area, much less the very stringent NO_x emissions limits the TCEQ is considering imposing, would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area.
1. The TCEQ's SIP modeling results and 8-hour ozone monitoring data do not provide adequate justification.

AECT believes the reason the DFW non-attainment area is not in attainment with the 8-hour ozone standard is because of the NO_x and VOC emissions from sources located in that area, especially mobile sources, off-road sources, and other area sources, and not because of NO_x emissions from the EGUs or other types of NO_x emissions sources located in parts of East Texas outside the DFW non-attainment area. At the November 18 stakeholder meeting, the TCEQ staff presented PowerPoint slides that seemed to indicate the DFW area could come into attainment with the 8-hour ozone standard through either a 45% reduction in NO_x emissions, or a combination of a 40% reduction in NO_x emissions along with a 50% reduction in VOC emissions, made by sources located in the DFW non-attainment area.

The TCEQ has not presented adequate technical and scientific support for the conclusion that the imposition of any more stringent NO_x emissions limits in parts of East Texas outside of the DFW non-attainment area, much less the very stringent NO_x emissions limits being considered, would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area. The SIP modeling results alone do not provide such technical and scientific support because they are predictive, rather than actual, data. Adequate technical and scientific support must include actual data to validate the effectiveness of NO_x emissions reductions in parts of East Texas outside of the DFW non-attainment area. Such actual data include the ambient ozone data from the monitoring sites in the DFW non-attainment area that have been collected over the past several years. Before seeking to impose more stringent NO_x emissions limits on EGUs in the parts of East Texas outside the DFW non-

attainment area, the TCEQ needs to first demonstrate that the previous NO_x emissions reductions achieved by such EGUs since 2000 have resulted in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area.

Pursuant to the rules in 30 TAC Chap. 117, Subchapter B, and the voluntary agreements under the Northeast Texas Air Care Early Action Compact, NO_x emissions from EGUs in the parts of East Texas outside the DFW non-attainment area have been reduced by at least 50% since 2000, and NO_x emissions from cement kilns have also been reduced significantly since that time. Nevertheless, the 8-hour ozone monitoring data collected at the DFW non-attainment area monitoring sites since 2000 have not demonstrated that those NO_x emissions reductions brought the DFW non-attainment area into attainment with the 8-hour ozone standard. In fact, it is not clear based on such monitoring data if those NO_x emissions reductions resulted in any reduction, much less a meaningful and necessary reduction, in the 8-hour ozone design value in the DFW non-attainment area. One reason it is not clear is because NO_x emissions reductions were also made by sources in the 4-county DFW 1-hour non-attainment area during the same timeframe.

The lack of demonstration of the effectiveness of the previous NO_x emissions reductions by EGUs in the parts of East Texas outside the DFW non-attainment area in lowering the 8-hour design value in the DFW non-attainment area, raises doubt as to whether seeking further NO_x emissions reductions from such remote EGUs would provide a meaningful and necessary reduction in the 8-hour design value in the DFW non-attainment area.

Furthermore, the TCEQ's SIP modeling results do not demonstrate that the stringent NO_x emissions limits being considered would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area. At the November 18 stakeholder meeting, the TCEQ staff presented SIP modeling results that seemed to suggest that imposition of the Houston/Galveston NO_x emissions limits on EGUs in East Texas would result in an average reduction of 1.1 ppb in the 8-hour ozone design value in the DFW non-attainment area. AECT asserts that a 1.1 ppb reduction in 8-hour ozone design value would not be a meaningful or necessary reduction for the following reasons. First, a 1.1 ppb reduction is only a small fraction (about 16%, according to the TCEQ staff at the stakeholder meeting) of the 8-hour ozone design value reduction that is needed to lower the 8-hour ozone design value to the attainment design value of 85 ppb. In addition, the TCEQ has not demonstrated that the DFW non-attainment area cannot reach attainment with the 8-hour standard without a 1.1 ppb reduction in 8-hour ozone design value.

Based on the foregoing, the TCEQ has not provided the requisite technical and scientific support for their position that the imposition of any more stringent NO_x emissions limits in parts of East Texas outside of the DFW non-attainment area, much less the very stringent NO_x emissions limits being considered, would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area (i.e., would be necessary to bring the DFW non-attainment area into attainment with the 8-hour ozone standard).

2. The airplane monitoring data do not provide adequate justification.

At the November 18 stakeholder meeting, TCEQ staff briefly discussed the use of airplane monitoring data collected in East Texas as support for the very stringent NO_x emissions limits it is considering imposing on EGUs in East Texas. However, the TCEQ staff has not made any such data available, nor did it discuss such data in any detail at the meeting. AECT requests that the TCEQ provide it with copies of such data and any analysis of that data that the TCEQ is using or plans to use to support the very stringent NO_x emissions limits it is considering. Even though AECT has not been privy to such data or subsequent analysis of the data, based on its review of the Baylor airplane monitoring data collected several years ago, AECT believes that there are significant limitations to the use of airplane monitoring data that would preclude their usefulness to support the very stringent NO_x emissions limits the TCEQ is considering. Such limitations include the following.

Airplane monitoring data only represent a snap-shot in time of the concentrations of ozone (or NO_x or other air contaminants). As a result, such data do not demonstrate or even indicate what the concentrations of ozone (or NO_x or other air contaminants) would be at a later time or day.

In addition, such data only represent a snap-shot in space of the concentrations of ozone (and NO_x and other air contaminants). Such data do not demonstrate what the concentrations of any such air contaminants are at a different altitude than the altitude at which the data were collected or at different lateral locations at the same altitude. It is AECT's understanding that the airplane monitoring data generally were collected at an altitude of at least 800-1000 feet, even though the relevant altitude for modeling and monitoring attainment with the 8-hour ozone standard is ground level. The TCEQ has presented no information or data to support a conclusion that the 8-hour ozone concentration at a ground level location is the same as the concentration measured by an airplane at a much higher altitude directly above that location, or that there is any correlation between the concentrations at the two altitudes.

Moreover, the airplane monitoring data do not even predict, much less demonstrate, whether, and if so, how much, the stringent NO_x emissions limits would reduce 8-hour ozone concentrations in the DFW non-attainment area. Finally, the airplane monitoring data do not demonstrate how much of the measured ozone concentration(s) are due to NO_x or VOC emissions from mobile sources, off-road sources, other area sources, or non-EGU point sources, in the area.

3. Summary

Based on the foregoing, AECT is not aware of any actual data (rather than predictions from SIP modeling) that provide adequate technical and scientific support for the conclusion that the imposition of any more stringent NO_x emissions limits in parts of East Texas outside of the DFW non-attainment area, much less the very stringent NO_x emissions limits being considered,

would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area. Unless and until the TCEQ can develop and present such data, AECT believes that the TCEQ cannot legally require EGUs in parts of East Texas outside of the DFW non-attainment area to achieve any further NO_x emissions reductions, much less the 73%-93% reductions that would be required to comply with the very stringent NO_x emissions limit the TCEQ is considering. Rather than focusing on NO_x emissions from EGUs in those parts of Texas, the TCEQ staff need to focus their attention and future TCEQ rules on requiring the requisite NO_x and VOC emission reductions from sources, especially mobile sources, off-road sources, and other area sources, in the DFW non-attainment area, especially in the original 4-county DFW non-attainment area.

- D. Even if the TCEQ could present adequate technical and scientific justification that the NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would lead to a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, it would be arbitrary, unfair, improper, and illegal for TCEQ to limit the imposition of such NO_x emissions reductions to EGUs (and cement kilns) in East Texas.

AECT understands that in the parts of East Texas area outside of the DFW non-attainment area, approximately 60% of the point source NO_x emissions result from sources that are not EGUs. Therefore, assuming for argument's sake, that the TCEQ could provide adequate technical and scientific support that NO_x emissions reductions in those parts of East Texas would result in a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, the TCEQ would have to justify why it would not require comparable NO_x emissions reductions from non-EGUs in the parts of East Texas outside of the DFW non-attainment area.

It is important to remember that EGUs in the parts of East Texas outside of the DFW non-attainment area have already achieved significant (at least 50%) NO_x emissions reductions under 30 TAC Chapter 117, Subchapter B, and the voluntary agreements under the Northeast Texas Air Care Early Action Compact, while all other types of sources in those parts of East Texas, except cement kilns, have not been required to achieve any NO_x emissions reductions. As a result of the NO_x emissions reductions such EGUs have achieved, the average NO_x emissions rate (in lb/MMBtu) of EGUs in Texas is currently the lowest of states that contain EGUs that burn coal and the 6th lowest of all states. AECT suggests that the same cannot be said of non-EGU (and non-cement kiln) NO_x emissions sources in East Texas outside of the DFW non-attainment area. It is also important to remember that EGUs in East Texas will have to make further NO_x emissions reductions under CAIR, and that no other type of NO_x emissions source in East Texas will have to make any NO_x emissions reductions under CAIR.

Therefore, even if the TCEQ could provide technical or scientific support for further NO_x emissions reductions in the parts of East Texas outside of the DFW non-attainment area, the TCEQ has no technical, scientific, or legal support for not also requiring NO_x emissions reductions from other types of NO_x sources in that area. It would be arbitrary, unfair, improper,

and illegal (e.g., under provisions of the Texas Government Code and Texas Clean Air Act) for the TCEQ to impose the stringent NO_x emissions limits on EGUs in those parts of East Texas without also imposing comparable NO_x emissions limits on non-EGUs in that area.

When AECT raised this point at the November 18 stakeholder meeting, the TCEQ staff's response seemed to be to ask that AECT identify the types of non-EGUs that are in the parts of East Texas outside of the DFW non-attainment area that AECT believes should be required to achieve comparable NO_x emissions reductions. AECT does not have the data necessary to identify the types of such non-EGU sources or the percentages of the total NO_x emissions in East Texas for which the different types of non-EGU sources are responsible. AECT believes it is the TCEQ's responsibility as part of the DFW SIP rulemaking process to develop (and provide) such information.

- E. Even if the TCEQ could present adequate technical and scientific justification that the NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would lead to a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, before seeking to impose such NO_x emissions limits on EGUs in East Texas, the TCEQ should first consider and use the NO_x emissions reductions that will be achieved by CAIR and other NO_x emissions reduction rules or commitments.

Even if the TCEQ could demonstrate that the stringent NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would lead to a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, before the TCEQ seeks to impose such NO_x emissions limits on EGUs in East Texas, it should consider and use the NO_x emissions reductions that will be achieved by CAIR and other NO_x emissions reduction rules or commitments. CAIR is the federal government's approach for addressing background and transport of ozone and ozone precursors. The TCEQ should also certify certain cost-effective TERP NO_x emissions reductions so that they can be included in the DFW SIP.

- F. Even if the TCEQ could present adequate technical and scientific justification that the NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would lead to a meaningful and necessary reduction in the 8-hour ozone design value in the DFW non-attainment area, there would be technical problems with such EGUs achieving those limits, compliance with those limits would cause staggering negative economic impacts, and, even absent those problems, owners/operators of such EGUs could not achieve the limits within the required timeframe.

Even if the 1.1 ppb reduction in the 8-ozone design value predicted by the TCEQ SIP modeling is realistic, it would be a small fraction (about 16%, according to TCEQ staff at the stakeholder meeting) of the 8-hour ozone design value reduction that is needed to lower the 8-hour ozone design value to the attainment design value of 85 ppb. In response to the possible

response that “every little bit of reduction in the 8-hour ozone design value will help”, AECT believes that such a comment is true only if the NO_x emissions reductions from EGUs in East Texas needed to achieve that “little bit of reduction in the 8-hour ozone design value” could be achieved without technical problems and without unreasonable negative economic impacts. AECT asserts that they cannot be.

For existing EGUs in East Texas to meet the stringent NO_x emissions limits the TCEQ is considering, such EGUs would have to be retrofitted with Selective Catalytic Reduction (SCR). As an aside, it is important to note that the inclusion of a NO_x trading program in the rules would not change this conclusion because the NO_x emissions limits the TCEQ is considering are so low that the use of an SCR on an EGU could not reduce the EGU’s NO_x emissions enough to create adequate NO_x emissions credits to support a trading program. Moreover, if such a trading program included a cap (as the Houston/Galveston trading program does), new EGUs would not be able to be installed in East Texas. Without new EGUs being installed, the additional electricity that will be needed to support the state’s growing population and to allow the state’s economy to continue to grow, would not be available. Obviously, such an outcome would be untenable for the state.

1. There would be technical problems with EGUs being able to meet the stringent NO_x emissions limits using SCR.

No lignite-fired EGU in the United States has ever been retrofitted with SCR. Therefore, the retrofitting of lignite-fired EGUs with SCR has not been technically or practically demonstrated. Based on its member companies’ technical understanding of the operation of their EGUs and of how SCR would operate on their EGUs, AECT believes there would be significant technical problems that would prevent SCR from being operated on existing lignite-fired EGUs properly and reliably. These problems would include the deposition of ash in the SCR, which because of higher ash content of lignite compared to western coal, likely would be a more significant problem than described below for western coal-fired EGUs that are retrofitted with SCR. Moreover, even if lignite-fired EGUs could be retrofitted with SCR, they would still not be able to meet the very stringent NO_x emissions limits the TCEQ is considering.

Consequences of the imposition of the stringent NO_x emissions limits the TCEQ is considering would force owners/operators of lignite-fired EGUs to convert them to fire western coal. Lignite-fired EGUs currently generate between 30% and 35% of the electricity generated by fossil fuel-fired EGUs in East Texas. The conversion of lignite-fired EGUs to fire western coal would exacerbate the current difficulty of getting enough western coal to Texas due to transportation issues. This problem could result in an inadequate supply of western coal to fire all of the existing western coal-fired EGUs once the lignite-fired EGUs were converted to fire western coal.

In addition, the year-round use of SCR on western coal-fired EGUs in the U.S. is very limited. Only about 33 western coal-fired EGUs in the United States, out of about 1100 coal-

fired EGUs in the U.S., are currently equipped with SCR. A majority of these SCRs are operated only during the ozone season – which in most instances, is only a five month period.. Therefore, there is not much representative operational history for western coal-fired EGUs equipped with SCR. However, the operational history that does exist shows that the use of SCR on western coal-fired EGUs has resulted in technical and operational problems. For example, a representative of Texas Genco, which is the only company in Texas that has retrofitted a western coal-fired EGU with SCR, stated at the November 18 stakeholder meeting that they have experienced operational problems due to ash deposition in the SCR. Further, EGUs in other states that have been retrofitted with SCR have had problems due to the oxidation of sulfur dioxide to produce sulfur trioxide, which reacts in the atmosphere to form sulfuric acid. Moreover, emissions data for western coal-fired EGUs that have been retrofitted with SCR show that a majority of them could not meet the most stringent NO_x emissions limits the TCEQ is considering.

Further, many gas-fired EGUs could not meet the most stringent NO_x emissions limits the TCEQ is considering, even if they were retrofitted with SCR.

Finally, SCR use on EGUs would decrease their electric net output (megawatt) capacities and their on-line reliability.

2. Compliance with the NO_x emissions limits the TCEQ is considering would cause staggering negative economic impacts.

Even if such technical problems would not occur or could be overcome, the negative economic impacts of the imposition of such NO_x emissions limits on EGUs in East Texas would be untenable because of their negative economic impacts. The negative impact on the economic viability of such EGUs and their owners/operators, and of the Texas mining industry, would be staggering. That, in turn, would cause a staggering negative impact on Texas citizens and businesses, and on the entire Texas economy.

a. Negative economic impact on EGUs.

Before the TCEQ can determine whether the stringent NO_x emissions limits it is considering imposing on EGUs in East Texas are economically reasonable, it must understand the costs that would result from the imposition of such limits.

AECT has determined that for over 100 gas-fired EGUs in East Texas, the cost to retrofit them with SCR would make their continued operation uneconomical. As a result, rather than retrofit such EGUs with SCR, the owners/operators of such EGUs may choose to shut them down. Such shutdowns are more likely because of the deregulated electricity market in Texas.

The costs to owners/operators of EGUs alone (i.e., excluding costs to the lignite mining industry and to the rest of the state of Texas, which are discussed below) would include the capital costs to install SCR on the EGUs in East Texas that will not be shut down or converted to a different fuel, to construct EGUs to replace the electricity generation capacity of the gas-fired EGUs that will be shut down, and to convert lignite-fired EGUs to fire western coal. AECT has developed a rough estimate of such costs assuming imposition of the least stringent of the NO_x emissions limits the TCEQ is considering. That rough estimate would be about \$10 billion.

It is critical to note that the \$10 billion estimate does not even include estimates of the very significant annual operating and maintenance costs that would be associated with SCR, the higher prices of western coal that would result because of increased demand for it due to the conversion of lignite-fired EGUs to fire western coal, and other costs that would result due to such fuel conversion or to shutdowns of gas-fired EGUs. Moreover, the experience of EGU owners/operators is that the actual costs to comply with NO_x emissions reduction requirements exceed, often significantly, the estimated costs. For example, the experience of at least one electric generating company (Texas Genco) that has installed SCR on its EGUs has been that the actual capital cost for SCR far exceeded the estimated cost. Nevertheless, even if the \$10 billion estimate is not lower than the actual capital costs for SCR would be, \$10 billion is an absurdly high cost and is clearly economically unreasonable.

As an aside, it is critical for the TCEQ to understand that the exorbitant costs that would be required to comply with the stringent NO_x emissions limits that TCEQ is considering imposing would ultimately be borne by Texas citizens and businesses through higher prices of electricity, fuel, and other items, and in other ways. Even worse, higher prices of electricity, fuel, and other items would disproportionately impact those who are poor and on fixed income, such as the elderly.

Not only would \$10 billion of capital costs to owners/operators of EGUs in East Texas clearly be economically unreasonable in and of itself, AECT believes that it is even more clearly economically unreasonable when one considers the insignificant 1.1 ppb reduction in the 8-hour ozone design value in DFW non-attainment area that might result from the stringent NO_x emissions limits (assuming the NO_x limits would, in reality, provide any measurable 8-hour ozone design value reduction). Based on the predicted 1.1 ppb reduction in the average 8-hour ozone design value, the cost of compliance with such NO_x emissions limits per ppb of predicted reduction in 8-hour ozone design value in the DFW non-attainment area, would be over \$9 billion/ppb. That is an astronomically high cost ratio. It is inconceivable that such a cost ratio could be considered to be economically reasonable or that it could justify the very stringent NO_x emissions limits (especially considering the inherent inaccuracies in the computer air modeling used to predict the 1.1 ppb reduction in the 8-hour ozone design value in DFW non-attainment area).

AECT understands that in evaluating the economic reasonableness of the stringent NO_x emissions limits, the TCEQ has used a cost effectiveness ratio of the \$/ton NO_x that would be reduced due to the limits. It is not proper to use such a ratio, however, because such a ratio improperly assumes that a ton of NO_x reduced at a source located in East Texas many miles from

the DFW non-attainment area would result in the same reduction in the 8-hour ozone design value in the DFW non-attainment area as would a ton of NO_x reduced from a source located in the DFW non-attainment area. The proper ratio to use is \$/ppb of predicted reduction in 8-hour ozone design value because such a ratio normalizes the impacts of NO_x emissions reductions based on where they would occur within East Texas and would also be reflective of associated air quality benefits.

b. Negative economic impact on mining industry.

As stated above, the NO_x emissions limits the TCEQ is considering imposing on lignite-fired EGUs in East Texas would force owners/operators of lignite-fired EGUs to convert them to fired western coal. It is AECT's understanding that if such conversion were to occur, the need for lignite would be reduced to such a degree that the lignite mining business in Texas would cease to exist. Lignite mining companies and associations will be presenting written comments that will provide more specific supporting information on the impacts and costs that would result if the TCEQ were to impose the NO_x emissions limits it is considering.

c. Negative economic impact on the State of Texas.

As discussed above, the imposition of the stringent NO_x emissions limits the TCEQ is considering may cause over 100 gas-fired EGUs to shut down. Such shutdowns would lead to several negative impacts. These would include losses of jobs and decreases in the property tax revenues in areas where the shut down EGUs are located (which, of course, would further strain the already under-funded Texas school systems). Moreover, there is no guarantee that the EGUs needed to generate electricity to replace the electricity that was generated by the shut down EGUs would be constructed quickly, if at all. Most likely, replacement EGUs would be gas-fired EGUs. The problem would be that the very high current and projected price of natural gas likely would be a barrier to companies or investors being willing to make the significant investment that would be necessary to construct and operate gas-fired EGUs. The possible result would be at least a short-term, and possibly a long-term, shortage of electricity in Texas. The Texas PUC and the Electric Reliability Council of Texas (ERCOT) would be very concerned with such a scenario. As a result, AECT suggests that TCEQ discuss the stringent NO_x emissions limits being considered with the Texas PUC and ERCOT, and seek their input as to the impacts such limits could cause on electricity supply and reliability.

Any shortage of electricity supply would, of course, lead to higher, possibly significantly higher, prices of electricity (and possibly other energy, such as natural gas). Such higher prices would obviously have negative impacts on both Texas citizens and businesses. These impacts would be the greatest on those who are poor and on fixed income, such as the elderly, because such people are disproportionately impacted by increases in the prices of electricity and other energy.

AECT also believes that another impact would be that Texas businesses would be forced to lay employees off and would be less likely to build new facilities or expand existing facilities in Texas.

The foregoing are only a few of the negative economic impacts the state would face if the stringent NO_x emissions limits being considered were to be imposed on EGUs in East Texas. While AECT cannot quantify the overall negative economic impact that such limits would cause in Texas, AECT is confident that such negative impact would be staggering and would severely harm the economy of Texas.

3. Even if the NO_x emissions limits the TCEQ is considering imposing would not lead to the above-described technical problems or the staggering negative economic impacts, owners/operators of EGUs could not achieve the limits within the required timeframe.

The retrofitting of EGUs in East Texas with SCRs to comply with the NO_x emissions limits that TCEQ is considering could not occur for all EGUs in East Texas by the SIP compliance deadline in 2009. The manufacturers of SCRs would not be able to manufacture enough SCRs in a timely manner, especially with the large number of SCRs that will be required to be installed on EGUs here and elsewhere in the country to comply with CAIR. In addition, there not be an adequate number of boilermakers and other necessary tradesmen to construct and install all of the SCRs. Moreover, there is an inadequate supply of labor, supplies, and equipment because of hurricane recovery efforts in Texas and Louisiana. Further, retrofitting of EGUs with SCR would require additional and longer EGU outages, which could jeopardize the availability of electricity during the time that SCR is being installed on the EGUs.

- G. The NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would jeopardize the TCEQ's ability to comply with Governor Perry's Executive Order RP-49 and the state's ability to address the electricity price and availability concerns discussed in the September 7, 2005 letter from the Texas PUC Chairman.

State of Texas leaders have recently recognized and expressed concerns with issues relating to the future price and availability of electricity and have taken steps to prevent such concerns from being realized. For example, on October 27, 2005, Governor Perry issued Executive Order RP-49 (see Enclosure 1), which among other things, requires steps be taken to encourage fuel diversity in electricity generation, which helps to keep electricity prices lower, and to discourage baseless delays in the issuance of permits for new EGUs. In addition, on September 7, 2005, Texas PUC Chairman, Paul Hudson, sent a letter to TCEQ Chairman White (see Enclosure 2), presenting concerns regarding future electricity prices and availability in Texas and suggesting that the TCEQ take actions to help prevent those concerns from being realized.

AECT believes that the stringent NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would jeopardize the TCEQ's ability to comply with Governor Perry's Executive Order RP-49 and the state's ability to address the electricity price and availability concerns discussed in the September 7, 2005 letter from the Texas PUC Chairman. AECT encourages that TCEQ to keep the Executive Order and Texas PUC letter in the forefront of its "mind" during this rulemaking process, so as to ensure that any NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas would not directly or indirectly cause the electricity price and availability problems the Executive Order RP-49 and the PUC Chairman's letter are trying to prevent.

H. The TCEQ needs to slow this rulemaking process down.

In light of the above-described very significant concerns with the stringent NO_x emissions limits the TCEQ is considering, this rulemaking process is moving much too fast. The TCEQ needs to slow down this rulemaking process and take a more deliberate and studied approach, so that it can fully and properly address such concerns.

The TCEQ is not legally required to have the DFW SIP rules finalized until sometime before June 15, 2007. The November or December 2006 deadline the TCEQ is trying to meet is an arbitrarily-set, non-legally binding deadline. It is AECT's understanding that the TCEQ set such deadline because of the Settlement Agreement between the TCEQ and the Plaintiffs in the *Blue Skies Alliance* case. If that is true, it is critical to note that there is nothing in the Settlement Agreement that requires the TCEQ to complete the DFW SIP rules by November or December, 2006. What the Settlement Agreement says is that the TCEQ "shall make a good faith effort" to submit an 8-hour ozone DFW SIP in advance of the June 15, 2007 deadline. Nothing in the Settlement Agreement states how far in advance of that deadline the SIP submittal must take place. Obviously, the SIP the TCEQ submits must demonstrate that it will lead to the DFW non-attainment area reaching attainment for the 8-hour ozone standard. Based on the above-described technical and economic problems that would be associated with the stringent NO_x emissions reduction requirements the TCEQ is considering, and on the fact that the TCEQ's modeling has not shown that the DFW non-attainment area would attain the 8-hour ozone standard even if such stringent NO_x emissions requirements were to be applied to EGUs in East Texas, much work clearly still needs to be done on the DFW SIP rules before such rules will demonstrate that they will lead to the DFW non-attainment area reaching attainment for the 8-hour ozone standard. If it takes until June 15, 2007 to develop DFW SIP rules that will do so, that is acceptable under the Settlement Agreement, provided the TCEQ is making good faith efforts toward developing those SIP rules.

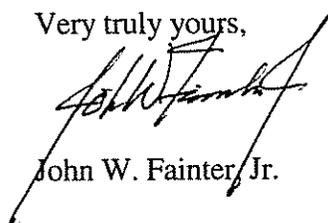
Notwithstanding the above, AECT requests that, at the least, the TCEQ delay the schedule for any rulemaking relating to EGUs in East Texas such that it is the same as the schedule for other DFW SIP rules. AECT understands the reason the TCEQ put the EGU rulemaking on a schedule that is 2-3 months faster than the schedule for the other DFW SIP rules; however, AECT believes that those 2-3 months need to be included in the rulemaking

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process to give the TCEQ more time to address the very significant concerns described above (as well as other, as-of-yet undefined, concerns) with the NO_x emissions limits the TCEQ is considering imposing on EGUs in East Texas.

AECT appreciates the TCEQ holding the November 18 stakeholder meeting, and the TCEQ's willingness to receive and consider comments. Please call Keith Courtney at (512) 499-3865 if you have any questions regarding these comments or would like to discuss them further, either by phone or in person. AECT would appreciate the opportunity to meet with appropriate TCEQ personnel to discuss these comments as might be appropriate.

Very truly yours,



John W. Fainter, Jr.

KAC/pjp

cc:

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TCEQ Commissioner Ralph Marquez
TCEQ Commissioner Larry Soward

Public Utility Commission Chairman Paul Hudson
Public Utility Commission Commissioner Julie Parsley
Public Utility Commission Commissioner Barry Smitherman

Electricity Reliability Council of Texas President and CEO Thomas F. Schrader
Electricity Reliability Council of Texas Sam R. Jones, Executive Vice President and COO

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