

EVALUATION OF TESTIMONY

The Texas Natural Resource Conservation Commission (commission) held public hearings on proposed revisions to the state implementation plan (SIP) in Longview on October 23, 2001, and in Tyler on October 24, 2001. The comment period was originally scheduled to close on October 24, 2001, but at the request of the United States Environmental Protection Agency (EPA) was extended through November 7, 2001.

The following commenters submitted written or oral testimony on the proposal: the Honorable Mickey D. Smith, Gregg County Judge and co-chair of the Northeast Texas Air Care (NETAC); Mathews & Freeland, L.L.P., representing NETAC; the Honorable Kevin P. Eltife, Mayor, City of Tyler (Tyler); Greg Morgan, Operations Manager for Tyler Water Utilities, representing the City of Tyler (Tyler); Tammy Campbell, director of Working Effectively for Clean Air Now (WECAN); Millicent Canter of WECAN; Sue Barham of the League of Women Voters of Texas (LWV-Texas); Pamela Reeves and Ron Sefrna of the League of Women Voters of Tyler (LWV-Tyler); Tom “Smitty” Smith of Public Citizen’s Texas Office (Public Citizen), Karen Hadden of the Sustainable Energy and Economic Development Coalition (SEED); Don Dowdy of the Big Bend Sierra Club (Sierra - Big Bend); Michael W. Behrens, Executive Director of the Texas Department of Transportation (TxDOT); the EPA; William E. Driscoll of TXU Business Services (TXU); L. Elizabeth Gunter of American Electric Power on behalf of Southwestern Electric Power Company (AEP); Tom Mullins of Tyler Water Utilities (Tyler Water); and 205 individuals. The organization WECAN was also endorsed by LWV-Texas, LWV-Tyler, the League of Women Voters of Longview (LWV-Longview), the Lone Star Chapter of the Sierra Club, the Caddo Lake Institute, the SEED Coalition, and Public Citizen.

The NETAC presented NETAC Resolution 2001-1, "Resolution Concerning Northeast Texas region Ozone SIP Revision," which generally supported the SIP revision as proposed by the commission. The WECAN organization presented a document called the "Citizens Implementation Plan Versus State Implementation Plan" (CIP) which generally supported the SIP revision as a minimal plan and suggested additional and significantly more stringent control measures. One hundred seventy-nine individuals submitted a form letter in support of the CIP as proposed by WECAN, and 13 individuals supported the CIP through a modified form letter with additional and more stringent control measures. Finally, two individuals supported the SIP as proposed and stated that no more control measures were needed in the region.

RESPONSE TO COMMENTS

General

Two individuals commented that they support the SIP as was developed in conjunction with business, industry, and local community leaders, and are opposed to more stringent measures until the results of the proposed plan are seen. One individual commented that the plan is a good example of a proactive partnership between all stakeholders.

The commission appreciates the support. The commission will continue to pursue all possible measures in emission reductions necessary to demonstrate attainment in the Northeast Texas region. The commission has not added additional steps or measures to the plan at this time.

NETAC supported adoption of the commission's proposed SIP submittal as a means to expeditiously attain the one-hour ozone standard and to avoid a nonattainment designation.

The commission appreciates the support and recognizes the considerable efforts of NETAC in the preparation of the plan.

One individual commented that the plan puts responsibilities on others and depends on implementation of federal guidelines that are already in place, and questioned what would happen if the guidelines were relaxed. One individual commented that it was obvious that the air was not going to get any better with voluntary measures.

This SIP revision relies not only on federal- and state-mandated control measures, but also on voluntary reductions from certain local industries. The commission does not anticipate federal or state rules being relaxed; however, if relaxation did occur, the commission would need to assess the impact of any relaxation on the attainment demonstration. The EPA SIP planning guidance allows for a certain amount of voluntary measures as appropriate for attainment demonstrations (for a given pollutant, up to 5.0% of the total reductions needed for attainment). In addition, the voluntary reductions from industry are enforceable by the commission through Agreed Orders entered into by the affected companies.

One individual commented that if we pollute in the area then the area becomes a problem for other areas, and that the area may lose visitors and natives if the air is too bad.

The commission agrees that unhealthy air has not only adverse health impacts, but may also have unfavorable economic impacts that affect an area's ability to attract businesses, residents, and visitors. Because of the regional nature of the ozone problem, the commission has adopted a regional control strategy for East and Central Texas. The current SIP revision for the Northeast Texas region contains a combination of regional and local control strategies that will result in air quality improvements and attainment of the one-hour standard.

One individual expressed concern about the visibility in Big Bend from sulfur dioxide (SO₂) and nitrogen oxides (NO_x), and commented that the more NO_x is reduced, the more SO₂ is reduced. Sierra - Big Bend stated that the commission should make Big Bend visibility one of its highest priorities.

The purpose of this SIP revision is to implement control strategies to reduce NO_x emissions in the Northeast Texas area in order to assure attainment of the one-hour ozone standard. Although this particular SIP revision is not focused on SO₂ or visibility issues, the commission believes they are important. As a member of the Central States Regional Air Planning Association, the commission takes an active role in identifying visibility issues and developing strategies to address them, as required by the federal regional haze rules.

Health-Related Issues

WECAN, supported by LWV-Texas, LWV-Tyler, LWV-Longview, Sierra Club-Lone Star Chapter, Caddo Lake Institute, SEED Coalition, Public Citizen, and 180 individuals, commented that community health deserves high priority, and that strong measures should be enacted to ensure safe air. Three individuals commented that clean air plans developed in past years have failed to clean the air and

continue to jeopardize the environment and the health of Texans, and that it is time for the commission to make community health the highest priority. One individual commented that the current SIP is probably more of the same. Two individuals expressed concern over the lack of attention paid to health effects of ozone, and commented that the SIP will not safeguard health. One individual commented that it is the responsibility of government to protect citizens of the state and the environment.

The commission agrees that environmental and health issues deserve high priority. By implementing control measures to reduce ozone levels, the Northeast Texas SIP revision assures that the health-based one-hour ozone standard will be attained in the Northeast Texas area.

An individual commented that there is no analysis of social or economic considerations and if air quality is not improved, economic and social consequences will rise including increased illness, medical expenses, sick days, and premature death.

Because the Northeast Texas SIP revision is a local, voluntary initiative, the commission has not performed an analysis of social and economic considerations. The control measures contained in this SIP will result in lowered ozone levels, improved air quality, and attainment of the one-hour ozone national ambient air quality standard.

WECAN and 179 individuals commented that power plant pollution accounts for over 1,300 premature deaths in Texas annually, and when pollution levels are high, emergency room use goes up with asthma attacks and other breathing problems. One individual commented that EPA should not rely on the honor system to protect the public's health.

Ensuring the health of Texas citizens is a top priority of the commission. The voluntary control strategies being implemented as part of the Northeast Texas SIP include reductions from power plants, resulting in a net improvement in air quality and attainment of the one-hour ozone standard. The commission disagrees that EPA relies on an honor system to protect community health. The reductions from industry being implemented through this SIP are enforceable by the commission and EPA through Agreed Orders entered into by the affected companies.

An individual commented that in his former practice as a lactation counselor that he saw a 300% rise in the incidence of acute and chronic respiratory distress in children who were statistically not susceptible to those conditions within a year after the adoption of the Voluntary Emissions Reduction Program (VERP) for grandfathered facilities.

The commission does not see a cause and effect relationship between these events. The VERP provisions do not authorize grandfathered facilities to increase their emissions. On the contrary, the intent of this program is to obtain emissions reductions from these facilities and a resulting improvement in air quality. Therefore, any increase in respiratory illnesses could not reasonably be attributed to the VERP program.

The City of Tyler commented that Tyler's ozone levels, as measured by the monitor located at Pounds Field Airport, have never violated the one-hour ozone standard. The City stated that the official monitoring station in Smith County should continue to be used as the basis for regulatory decisions on air quality in Tyler. Tyler Water supported these comments. TxDOT requested to know why Smith County is included in the attainment plan, because TxDOT cannot find any exceedances of the one-hour ozone standard.

The commission understands the concerns that ozone monitoring data from outside Smith County, namely Gregg County, showing exceedances of the one-hour ozone standard are being used in air quality planning activities that affect Smith County. The ozone continuous monitoring station in Smith County, located at the Pounds Field airport, has not recorded a violation of the one-hour standard averaged over a consecutive three-year period. This monitor did record one exceedance in 1999, when a 127 part per billion (ppb) value was reported, but this is the only one-hour exceedance ever recorded at the monitor since it began operation in 1994.

The current SIP revision represents the continuation of a long-standing cooperative effort among Northeast Texas counties to address the multi-county ozone problem in their region. NETAC was voluntarily formed in 1994 by mutual agreement among Gregg, Harrison, Rusk, Smith, and Upshur Counties as a partnership to help focus air quality planning efforts for the region. This SIP represents a proactive, voluntary approach initiated and implemented at the local level. Inclusion of Smith County in the plan reflects the regional nature of ozone and the regional approach needed to solve the ozone problem. The SIP does not involve issues of nonattainment boundaries; these matters will be considered in the event that the area is required to develop a plan for attainment of the eight-hour ozone standard in the future.

An individual commented on water pollution from electric utility plants.

Water quality issues are beyond the scope of this SIP revision, which addresses only air quality issues; specifically, the one-hour ozone standard. However, the commission places a very high priority on enforcement of water quality standards, and will forward any suspected water quality violations or concerns to the appropriate commission staff for their consideration.

Emissions and Growth

WECAN and 180 individuals commented that the SIP includes good measures but falls short. It needs strengthening, and they support the CIP and the incorporation of the CIP measures into the state SIP.

One individual commented that adopting the CIP will create more jobs than giving fossil industries a free ride.

The commission disagrees with the statement that the SIP falls short and does not do enough to address the air quality problems in the Northeast Texas area. As a result of the control strategies that have already been adopted and that are being developed, emissions of ozone precursors will be reduced in the Northeast Texas region by approximately 33%.

WECAN and 179 individuals commented that polluting industries, chemical plants, and power plants must make substantial reductions in a timely manner. One individual commented that we should not cater to big business.

The Agreed Orders which are a part of this SIP revision specify that the affected companies make NO_x reductions ranging from 18% to 60% on individual units, or an overall reduction of almost 33%. In addition, the commission's regional strategy applies in the Northeast Texas area, and the resulting reductions were specifically accounted for in the modeling.

WECAN and 179 individuals commented that proposed reductions as low as 10% are unacceptable, when Houston/Galveston (HGA) and Dallas/Fort Worth (DFW) SIP revisions call for NO_x reductions of

90% and 88%, respectively. The commenters further stated that industry should reduce NO_x and volatile organic compound (VOC) emissions by 75% and 50%, respectively.

The commission disagrees with the comment. The objective of this SIP revision is to achieve emissions reductions that will assure attainment of the one-hour ozone standard in the Northeast Texas area. The commission's modeling shows that the levels of reductions in this SIP revision are sufficient to accomplish this objective. SIP planning is specific to the local area; therefore, the HGA and DFW SIP revisions contain more stringent control strategies because of the greater emissions reductions required for attainment of the one-hour ozone standard in those areas.

WECAN and 180 individuals commented that new industrial growth should be prevented if it was not specifically included in the SIP modeling, unless comparable reductions through offsets are made in the immediate region. The EPA requested an explanation of the state's plan to oversee and issue permits for future growth in emissions, and to re-evaluate effectiveness of the SIP and make revisions if needed.

Two individuals commented that the SIP was inadequate in providing allowances for future growth and would suffer significant setbacks with the siting of new major sources not included in the plan. One individual commented that it was unrealistic to assume that there will be no new major sources locating in the area during the next five years, and that provisions must be incorporated into the SIP so as not to facilitate the location of new industry and assure that the air quality goals of the SIP are met. One individual commented that the plan is primarily concerned with keeping the status quo and is not considering the area growth probability. One individual commented that because the plan does not include the effects of growth, it would not likely keep the area in attainment in the long run.

The commission's modeling analysis accounts for growth projected to 2007. In forecasting growth, the commission's modeling staff took into consideration all known and anticipated sources in the area. These growth projections assumed an overall rate of growth, including new sources, determined by area-specific economic indicators. However, growth projections were not made for the electric generating facilities (EGFs) in the Northeast Texas area because the units were operating at full capacity during the modeled episode. These units cannot increase generating capacity without adding additional units, which would subject them to New Source Review permitting requirements and application of best available control technology (BACT) as described in the following paragraph. The reductions from the three Agreed Orders which are a part of this SIP were also included in the modeling.

The commission does not have the authority to require offsets from new or modified sources in the Northeast Texas area, or to prevent such sources from locating or expanding in the area.

Offsetting is limited to ozone nonattainment areas under the federal nonattainment new source review program, which is delegated to the state. A new or modified source in an area that is in attainment of the ozone standard is subject to state new source review. If a permit is required, BACT must be applied. In addition, certain larger projects may be subject to prevention of significant deterioration rules, which also require the application of BACT. With regard to utility boilers, it is anticipated that simple or combined cycle gas turbines in cogeneration projects, not gas-fired boilers, would be built in the future to meet increased electric demand in the Northeast Texas area. The commission's current BACT guidelines of 5 - 9 parts per million by volume, dry NO_x for simple/combined cycle gas turbines require application of selective catalytic reduction, which achieves 90 - 95+% control. Given this high degree of control for future combustion units in the Northeast Texas area, it is very unlikely that controlled industrial growth in the future would

increase NO_x emissions enough to elevate ozone levels from the current modeled 118 ppb to above 124 ppb.

Changes in emissions are tracked through emissions inventories conducted by the commission. In the Northeast Texas area, point source inventory data are collected annually for sources emitting a minimum of 10 tons per year (tpy) VOC or 25 tpy NO_x. It is anticipated that the next modeling analysis to be performed for Northeast Texas will be the eight-hour ozone attainment demonstration, provided that the area is designated nonattainment under that standard. The EPA's schedule for designation of nonattainment areas and implementation of the eight-hour standard is uncertain at the present time. However, the current SIP revision provides assurance, based on specific, legally enforceable emissions reductions and substantiated by photochemical modeling, that the one-hour ozone standard will be maintained in Northeast Texas through 2007. If new information indicates that attainment of the standard is in jeopardy, the commission will take steps to obtain further emission reductions.

Through the implementation and identification of realistic, innovative, and feasible emission reductions, the Northeast Texas region should complete its reductions by 2003, approximately four years before the modeled attainment date of 2007. The early reduction schedule has three clear advantages: 1) it will allow the time needed for three years of clean monitoring data under the Federal Clean Air Act (FCAA); 2) it will allow time for the HGA reductions to be implemented; and 3) it will allow time to invoke contingency measures, if necessary.

WECAN and 180 individuals commented that power plants should reduce mercury by 90%. One individual commented that the mercury issue is very important, and that mercury should be reduced by

100% and the criminal aspects of not controlling mercury should be considered. WECAN, Public Citizen, and EPA commented that the Public Utility Commission of Texas (PUCT) has provided up to 80% reimbursement costs for reductions of emissions up to 50% in mercury, and that it makes sense to do these reductions now with PUCT's help, rather than waiting until the funding is no longer available. The EPA stated that this would help to address other long-term air quality issues such as regional haze, mercury, ozone transport, and the eight-hour ozone standard. For example, incorporation of mercury controls along with the installation of NO_x controls could lessen future retrofitting costs and achieve additional emission reductions for which the costs could be recovered. WECAN and Public Citizen commented that controlling mercury emissions in this region have been neglected too long and the region has a coal burning power plant that is the number one perpetrator of mercury emissions in the nation.

The commission agrees that reductions in mercury emissions are desirable. However, this SIP revision addresses attainment of the one-hour ozone standard in the Northeast Texas area primarily through reductions in NO_x emissions. The commission notes that mercury emissions from a variety of sources are being addressed at the federal level. Specifically, in December 2000 the EPA announced that it will regulate emissions of mercury and other air toxics from coal- and oil-fired EGFs, with proposal and adoption of the regulations to occur by December 15, 2003 and December 15, 2004, respectively. The EPA will provide a number of opportunities for stakeholder and public participation in the development of those regulations. In addition, EPA has issued regulations to significantly reduce mercury emissions from major sources other than EGFs. Those actions include stringent regulations for municipal waste combustors, medical waste incinerators, and hazardous waste combustors. When fully implemented, these actions will reduce total nationwide mercury air emissions by nearly 50%.

Grandfathered Sources

WECAN and 179 individuals stated that facilities that predate the commission's air permitting requirements (i.e., those that are "grandfathered") should reduce emissions 50% by 2005 and should be inspected to determine if unauthorized modifications have been made. One individual commented that human lungs do not understand grandfathering.

The commission has made no change in response to the comments. The adopted orders apply without regard to the permit status of the sources. The commission agrees that it is appropriate to pursue cost-effective measures to reduce pollution; however, any such measures must be within the statutory authority of the commission. A grandfathered facility is one that existed at the time the Texas Legislature amended the Texas Clean Air Act (TCAA) in 1971. These facilities were not required to comply with (i.e., were grandfathered from) the then-new requirement to obtain permits for construction activities. Whenever a grandfathered facility is modified (as that term is defined in the TCAA), it is required to comply with the TCAA permitting requirements in order to be authorized to construct and operate that modification. Further, the definition of "modification" specifically excludes changes to facilities that are authorized by an exemption; i.e., any facility, including a grandfathered facility, can make a change using a commission exemption (now permit by rule) and this change is not considered to be a modification that would trigger the permitting requirements of the TCAA.

During the 76th Legislature, 1999, the issue of grandfathered sources was addressed by two different legislative programs. The passage of Senate Bill (SB) 766 provided a framework for a voluntary permitting program for grandfathered sources under the TCAA, as well as SB 7, which

requires mandatory permitting and emission reductions from EGFs. The commission continues to pursue enforcement action against companies that are not in compliance with the permitting requirements of the TCAA. However, SB 766 does provide for amnesty from enforcement for facilities eligible to participate in the VERP program, as long as a permit application was received before the TCAA deadline of September 1, 2001.

During the 77th Legislature, 2001, the issue of grandfathered sources was further addressed by House Bill (HB) 2912, which requires the permitting of grandfathered facilities, including the requirement of a 50% reduction of NO_x emissions from pipeline compressors in East Texas, and the installation of ten-year old BACT at most other grandfathered facilities. House Bill 2912 requires grandfathered facilities to apply for a permit by September 1, 2003 (East Texas region) or September 1, 2004 (West Texas region), and compliance with the permit is required (using ten-year old BACT) by March 1, 2007 or March 1, 2008, respectively.

Alternative Measures

WECAN and 179 individuals commented that cleaner vehicles, fuels, mass transit, and telecommuting should be required. One individual commented that locally-generated mobile pollution sources are a much less significant factor.

The commission has no authority to regulate the efficiency requirements of vehicles. The FCAA specifically preempts states other than California from creating engine standards. However, the commission has adopted regulations requiring cleaner fuels in all of the state's ozone

nonattainment areas as well as throughout East and Central Texas. The commission does not believe that mass transit would be a cost-effective alternative for the Northeast Texas area.

WECAN and 179 individuals commented that educational outreach to inform citizens about the effects of ozone pollution should be funded.

The Northeast Texas Council of Governments (NETCOG), in addition to the state's other major metropolitan planning organizations, receive funding from the commission and other sources. Part of this funding is dedicated to public education. NETCOG has instituted many programs directed at increasing public awareness and encouraging citizens to take actions to benefit air quality. For example, public service announcements are aired on radio stations in the five-county area during the ozone season. NETCOG has implemented an ozone action day program to notify citizens and businesses of potential high ozone days. On such days, participating organizations and businesses fly special flags as reminders. NETCOG also distributes air quality brochures, and coordinates an educational program in local schools. NETCOG may be contacted at (903) 984-8641 for more information.

WECAN and 179 individuals commented that work hour shifts should be implemented, along with stretched work days, and reduced work days. They also commented that major employers and governments should have incentives for 10% of their employees to telecommute.

The commission supports and encourages measures that reduce the length, duration, and frequency of motor vehicle trips. The ozone attainment demonstrations for the HGA and DFW areas, for example, include such measures as telecommuting, in addition to many other commuter-

related programs. However, these programs are all voluntary, because the commission does not have the authority to mandate them.

WECAN and 179 individuals commented that renewable energy measures such as an appliance swap program, and a program to promote energy efficiency and conservation measures for new buildings, and adopting energy star appliances in the energy code.

Senate Bill 5 established statewide commercial and residential construction codes which must be adopted and implemented statewide by municipalities, counties, and/or certain political subdivisions. Senate Bill 5 also set up an energy efficiency grant program to retire older appliances and replace them with new, more efficient appliances. The commission anticipates these measures being implemented throughout the state in compliance with the SB 5 requirements. The commission encourages local governmental and business organizations to promote energy conservation.

Modeling

TxDOT commented that it was not asked to provide on-road inventory data for either the 1996 base year or the 2007 attainment year, and therefore does not know how the data was developed or where it originated. TxDOT also commented that Page 4-23 of Appendix A stated that growth factors for mobile source emissions in Texas were based on guidance from the commission, and TxDOT could not find further information on this guidance.

In performing the modeling for this SIP, Environ started with the information from the DFW SIP such as mobile input files and vehicle miles traveled (VMT) for the DFW perimeter counties. This information is contained in from two previous DFW SIP revisions: 1) February 24, 1999: Section 3.13.4, Page 3-88, and 2) April 19, 2000: Appendix X (NCTCOG Report, NCTCOG 2007 On-road Mobile Source Episodic Emission Inventory for the Dallas-Fort Worth 37-County Modeling Domain, Volume II). The VMT used for the perimeter counties for the 1995 and 1996 inventories is county-specific, facility type-specific Highway Performance Monitoring System (HPMS) data. The growth rate used to obtain the 2007 perimeter county VMT was derived by calculating an annual growth rate using HPMS for 1995 and 1996, and applying the growth rate to the baseline VMT. The annual growth rate is stated to be 2.72%.

TxDOT commented that page 5-7 of the SIP states that Tier 2 standards, federal low-sulfur gasoline, and heavy-duty diesel standards produce VOC reductions of 31.9 tons per day (tpd) in the Northeast Texas region, and that the reductions in the SIP appear to be the 2007 revised on-road inventory, not daily reductions.

The commission agrees with the comment, and has replaced "reductions" with "emissions" in the headings for Table 5.5-1.

EPA recommended that additional information be provided on the breakdown of NO_x reductions contained in the SIP.

A new table (Table 3.8-1) identifying the breakdown of emission limits and associated reductions has been incorporated into the revised SIP narrative.

EPA commented that the proposed SIP narrative does not match the latest modeling efforts. The EPA commented that in one place the narrative states that the federal Tier 2/low sulfur reductions were included in the modeling demonstration, and in another place the narrative states that these federal measures were not included. The EPA also stated that the narrative should correctly discuss the development of the future base case and the control strategy.

The commission disagrees with the first part of this comment. Reductions from Tier II and low-sulfur gasoline were included in the future base case. Commission staff cannot find a reference in the SIP narrative stating that these reductions were not included.

Regarding the second part of the comment, additional modeling was conducted by Environ that reflected the final draft of the proposed Agreed Orders with Southwestern Electric Power Company (SWEPCO), TXU Generation Company LP (TXU), and Eastman Chemical Company, Texas Division (Texas Eastman). This is documented in Appendix H, a memorandum from Greg Yarwood of Environ to the NETAC Technical Committee, entitled "Revised one-hour ozone attainment demonstration for East Texas reflecting board orders proposed in 2001." The SIP narrative has been edited to clarify which on-road mobile source reductions were used in the final future base case and control strategy scenarios.

EPA encouraged city and county governments to take advantage of the SB 5 Texas Emissions Reduction Program (TERP) program by purchasing cleaner diesel equipment and including contract specifications requiring the use of cleaner equipment. The EPA also encouraged local governments to adopt requirements for more energy-efficient appliances as part of the SB 5-mandated energy codes, to help compensate for the increased peak electrical demand resulting from growth.

The commission agrees that local governments as well as private businesses should take advantage of the TERP program, which among other things provides funding toward the purchase of cleaner diesel engines. Although it may be challenging to realize the full funding potential of the TERP program, the commission is confident that the program will eventually be successful in reducing NO_x emissions throughout the state.

EPA commented that Section 2.6 of the SIP (Biogenic Sources) does not discuss the use of GloBEIS2 for emission estimates, which leads to confusion with language in Section 3, Photochemical Modeling. The EPA further commented that the 1996 base case inventory summary in Section 2.7 (Emissions Summary), which was used in the original 1995 and 1997 base case modeling, cites biogenic VOC emissions as 85% of total VOC. The EPA stated that it is unclear whether these numbers and Figure 2.7-1 (1996 emissions inventory pie charts) have been updated based on the GloBEIS2 values. The EPA commented that it may be beneficial to indicate that this 1996 inventory containing higher biogenic emissions was used in the initial modeling and targeting of control strategies, and that the final control strategy was developed using lower biogenic emissions for the 1995 and 1997 base cases, in addition to the reductions from new federal programs.

Chapter 2 of the SIP narrative has been modified to reflect the biogenics discussion in Chapter 3. Also, language has been added to Section 3.4 stating that the BEIS2/GloBEIS biogenics were used for the original base case performance evaluation and control strategy runs I-1 through I-10, and that the GloBEIS2 biogenics were used for the revised base case performance evaluation, revised 2007 future base, and control strategy runs I-11 through V.

EPA commented that the following sentence in Section 3.8 (Phase III Control Strategy Modeling) is misleading: "Strategy III-11 consisted of first revising the future base case by including federal emission control programs that will be in place by 2007, and lowering over-estimated biogenic VOCs by 30%."

The EPA stated that this language seems to indicate that the original 1995 and 1997 episodes were not rerun with the revised biogenics emission values, and that the base cases were not re-evaluated for model performance. The EPA recommended modifying the existing sentence to clarify that the base case model runs (1995 and 1997) were redone with the lower biogenic emissions, and the results were evaluated for modeling performance before the future base case was redone with the additional federal controls and other strategies included.

According to page 5-41 of Appendix A, the final 1995 and 1997 base cases used biogenic emissions from GloBEIS2. The performance evaluation was redone based on the revised biogenics. The commission has revised the SIP narrative to clarify this point in accordance with EPA's comment.

American Electric Power (AEP), on behalf of SWEPCO, commented that all references to AEP and/or Central and South West Services should be changed to SWEPCO. AEP stated that commitments have been made by SWEPCO or on SWEPCO's behalf by AEP (formerly Central and South West Services). AEP further commented that because SWEPCO is the party entering into the Agreed Order, references to the different entities in the SIP revision are confusing and inconsistent. AEP also noted that if Central and South West Services is ever used to indicate historic ownership of SWEPCO, "South West" is two words.

The commission made the requested change where appropriate.

AEP recommended rephrasing for clarity in Section 1.1 (Background), and correction of minor grammatical errors in Section 1.1 and Section 3.9.

The commission made the suggested changes.

AEP commented that in Sections 3.8 and 3.9 of the SIP, the Phase III and Phase IV the summary of the modeling discussion should be briefer in light of the September 26, 2001 ozone model re-evaluation.

AEP further commented that the discussion and presentation should reflect the percent reductions used in the more recent modeling, based on the episode days used in the model, and stated that presenting the Phase III reductions separately was confusing. AEP recommended specific language to summarize the updated NO_x reductions by SWEPCO, similar to the language in Section 3.8.2.

The commission disagrees that the Phase III and Phase IV discussions should be pared down.

However, the narrative has been clarified and revised to account for the more recent modeling conducted by Environ.

AEP commented that the scheduled completion date for the Pirkey NO_x reduction project by SWEPCO is Fall 2001, not 2000 as stated in the SIP.

The commission agrees with this comment. While commission staff were on a tour of the Pirkey facility in October 2001, the plant was down for maintenance and installation of the overfire air system for the NO_x reduction project. The SIP language has been revised to reflect the correct completion date.

AEP referenced the sentence in Section 3.9 reading "Taken together with the previously mentioned 20% reduction at Pirkey, total NO_x emission reductions at the plant are 30% from 1997 levels." AEP recommended that the language "on an annual basis" be added to the end of the sentence for clarification. AEP commented that the emission reduction amounts to which SWEPCO agreed, in tpy, do represent a 30% reduction from the 1997 emissions inventory on an annual basis; on any 30-day rolling average period; however, the associated reduction is 20%. AEP added that the compliance standard of 20% reductions was used in the re-evaluation of the model by Environ.

The commission made the suggested change. In addition, in Section 3.8.2 and Section 3.9 the commission has corrected references to 10% reductions from the Pirkey Plant, replacing them with the correct 20%.

AEP commented that a Table 5.3-1 contained in the August 22, 2001 draft SIP was not present in the September 12, 2001 SIP proposal. AEP commented that in the event this table is reinserted, the table should be referenced in the text in Section 5.3 (Agreed Orders). If the table were to be reinserted, AEP recommended that language be added to the second paragraph of Section 5.3 as follows: "Table 5.3-1 presents a summary of the actions which each company has agreed to undertake in the new Agreed Orders." AEP commented that because the compliance standard set forth in the Agreed Order with SWEPCO is in lb/MMBtu, the third column in Table 5.3-1 should be titled "Emission Rate" instead of "NO_x Emission Rate Reduction." AEP commented that the individual plant tons per day amounts should be deleted and replaced with the specific pounds per million British thermal units (lb/MMBtu) rates set forth in the Agreed Order. AEP further commented that the total ton amount should be given at the bottom to resemble TXU's table, and noted that the rates represent a 30-day rolling average, not an annual rate. AEP commented that if Table 5.3-1 is used, the tables corresponding to TXU's and Texas

Eastman's Agreed Orders do not have table headings, and recommended that table headings be consistent on each company's respective table.

It was not necessary to include Table 5.3-1 in the SIP revision. Instead, new Table 3.8-1, summarizing revisions to the allowable emission rates contained in the SWEPCO Agreed Order, and Table 3.8-2, summarizing the emissions reductions from SWEPCO, TXU, and Texas Eastman, have been added. Therefore, the commission has made no change in response to the comments.

AEP commented that the purpose of including Section 5.4 (Regional Strategies) of the SIP is unclear, because Section 3.6 (Future Case Emissions Inventory and Modeling) states that these future emissions "were not fully developed or approved when the photochemical grid modeling was conducted and thus are not accounted for in the modeling." AEP commented that if this discussion was included to inform the EPA of the regional strategy in anticipation of the eight-hour ozone standard, emphasis should be made at the beginning that most of these strategies have not been included in the modeling or used to support the compliance demonstration for this SIP revision. AEP recommended that the paragraph at the end of Section 5.4 be moved to the front of that section. AEP further commented that SWEPCO as well as other NETAC members have committed to make emissions reductions without knowing the effect of many of these future programs, and that this point should be made clear.

The modeling discussion in Chapter 3 clearly states that the regional strategy control programs such as SB 7 were not accounted for in the attainment demonstration modeling. However, the regional controls do make a considerable impact on improving the air in the Northeast Texas area. As shown in Table 5.4-1, the regional strategy achieves about 467 tpd NO_x reductions. The

commission does not believe that controlled industrial growth in the future would increase NO_x emissions enough to elevate ozone levels from the current modeled 118 ppb to above 124 ppb.

Mathews & Freeland, L.L.P. commented that, although the HGA and DFW attainment demonstration controls were not accounted for in the modeling, a conservative estimate of the anticipated reductions from those controls was included in the future base case. The commenter suggested that the SIP include a statement clarifying that the final reductions from the HGA and DFW attainment demonstration controls were not accounted for in the modeling.

The commission agrees with this comment, the essence of which is stated on page 4-23 of Appendix A. A statement clarifying the role of the HGA and DFW attainment demonstration reductions has been added to the SIP narrative.

AEP commented that Table 5.4-1 and the estimated NO_x reductions contained in it are misleading, and that the sources and methods used to derive these reductions, expressed in tpd, are not clear.

The commission does not believe that the emissions reductions data contained in the table are misleading. However, the first entry in the table, Stage I vapor recovery with an associated NO_x reduction of 8.5 tpd, has been deleted because this figure is for reductions of VOC, not NO_x, achieved by the program. Although VOC reductions from Stage I and other control programs are part of the regional strategy to reduce ozone, this particular table summarizes only NO_x reductions under the regional strategy. Also, the entry for SB 7 electric generating units has been increased to include permitted units which are required by Chapter 117 to reduce NO_x emissions. Commission

staff relied on information provided in the previous regional strategy SIP and DFW attainment demonstration SIP to supply values in the table.

TXU commented that Section 3.8.3 of the SIP indicates that Unit 1 at the Stryker Creek plant will be making NO_x reductions. TXU stated that, although Unit 1 will be making NO_x reductions, the company had already made enforceable reductions on Stryker Creek Unit 2 and decided not to commit to reductions on Unit 1 in the Agreed Order. TXU therefore requested that the SIP be modified to be consistent with the Agreed Order.

The commission has changed the referenced section to be consistent with the Agreed Order.

Mathews & Freeland, L.L.P. requested that the commission incorporate the findings of the Environ modeling study summarized in an October 18, 2001 memorandum, and AEP commented that this modeling should be reflected in Chapter 3 of the SIP as well as in the Agreed Orders. Mathews & Freeland, L.L.P. commented that the commission should clarify the specific emission reductions resulting from the Agreed Orders, and confirm to the EPA that these reductions will demonstrate attainment of the one-hour ozone standard. The commenter recommended that this be accomplished by amending Section 3.1 (Photochemical Modeling: Introduction) to state that additional modeling was performed to evaluate the effects of emissions reductions resulting from the Agreed Orders. The commenter also recommended that the additional modeling by Environ be summarized in Section 3 and attached as an appendix to the SIP.

The SIP narrative has been modified to incorporate the results of the Environ modeling. Table 3.8-1 now refers to the specific emissions reductions at SWEPCO, TXU, and Texas Eastman.

One individual commented that transport can carry toxins over thousands of miles into neighboring states. One individual commented about the SIP addressing transport into the area in which the area has no control over, and that it would seem more prudent to keep the ambient air as clean as possible so that things not in the area's control would not put it over 118 ppb. One individual commented that the level of 118 ppb for the one-hour ozone standard is too high for good health and does not give enough leeway for variables that the Northeast Texas area does not have any control over.

The modeling domain used for this attainment demonstration extended well beyond the Northeast Texas area so that the impact of other sources upon the area could be determined. The commission's modeling shows that, even without the benefits of the regional strategy included, ozone levels in the Northeast Texas area will be below the one-hour ozone NAAQS. The federal one-hour ozone standard of 0.12 parts per million is based on numerous health effects studies. The commission believes that the current SIP revision, which will result in ozone levels below the one-hour standard, is protective of public health.

Agreed Orders

AEP pointed out a spelling error for Harrison County on page 1 of the SWEPCO Agreed Order.

The commission agrees with this comment, and made the requested change.

AEP commented that based on the revised modeling as of September 26, 2001, stipulation 19 should reflect an emission rate of 0.25 lb/MMBtu, not 0.22 lb/MMBtu. AEP commented that, although SWEPCO still expects to make annual tonnage reductions in the amount agreed upon with NETAC prior

to the 1999 modeling, the stringency of the compliance standard based on a 30-day rolling average required SWEPCO to request a higher short-term emission rate. According to AEP, this higher emission rate for the Pirkey plant, taken together with greater reductions from the Wilkes and Knox Lee plants as well as adjustments made to other companies' modeled emissions, resulted in lower ozone than previously modeled.

After the comment period had closed and final revisions were being made to the Agreed Orders, SWEPCO indicated that it had more complete information regarding the reductions that could be made at each of the plants, based on the performance of equipment installed early to meet the requirements of the order. The final NO_x emission rates for Wilkes #2 and #3 were changed from 0.15 to 0.17 lb/MMBtu, and for Knox Lee #5, from 0.15 to 0.18 lb/MMBtu. The NO_x emission rate for Pirkey was reduced from 0.25 to 0.22 lb/MMBtu. The net effect of this change is that overall emissions from the affected units are the same (27.89 tons/day), but greater NO_x reductions are achieved at the source which most affects local ozone, namely Pirkey. NETAC's contractor performed another modeling run with the new SWEPCO emission limits, and the results were essentially the same (118 ppb ozone), which is in attainment of the one-hour ozone standard.

EPA Comments on Agreed Orders

General Comments:

EPA commented that the Force Majeure clause in the Agreed Orders be modified to delete a phrase relating to delays caused by compliance with the rules and regulations of any governmental authority.

The commission agrees with this comment and made the requested change to all three Agreed Orders.

EPA commented that the Agreed Orders all contain language regarding the requirements for approval of alternative projects. The EPA commented that the approval of alternative projects would require a SIP revision, or be processed through the Alternative Means of Control (AMOC) process outlined in 30 TAC Chapter 115, Subchapter J, to be federally enforceable.

The commission agrees with this comment and made the requested change to all three Agreed Orders. As the result of discussions with EPA and the affected companies, new language was added to each of the companies' Agreed Orders specifying the procedure by which approvals of alternative project(s) will be evaluated.

The Agreed Orders require the companies to utilize the Alternative Means of Control (AMOC) process established in 30 TAC Chapter 115, Subchapter J in order to obtain approvals of alternative project(s). However, the AMOC process was designed specifically to evaluate alternative plans for VOC emission sources, using a set of procedures that is not completely applicable to the NO_x reduction projects that are the subject of the current Agreed Orders. Therefore, the Agreed Orders specify an altered AMOC procedure to allow multiple plant plans, with the submission limited to information relevant to the change. Demonstration calculations and criteria for approval will be consistent with and limited to the NO_x control and SIP demonstration purposes of the Agreed Order.

EPA commented that the Agreed Order for Texas Eastman contained a provision that would allow the company to start up a unit that had been shut down under the Agreed Order also would be required to be processed as a SIP revision.

The commission agrees that any project to start up a unit that had been shut down under the Agreed Order should undergo review, and has combined this possibility with the discussion of how to receive approval for alternative projects, which are required to be processed through the AMOC process in 30 TAC Chapter 115, Subchapter J. The commission believes that the use of this federally enforceable approval mechanism will provide appropriate review of any such change.

EPA commented that the Agreed Order for Texas Eastman provided a good approach to monitoring, record keeping, reporting and testing, but that the specific commission rules and regulations must be cited in the Agreed Order in order to prevent confusion between the EPA, the commission, and Texas Eastman in the future regarding the applicable state requirement.

The commission has made no change in response to this comment, since the engine that is remaining in backup service capacity is grandfathered, and therefore has no permitting or Chapter 117 requirements. Also, since the engine is not located in an ozone nonattainment county, Chapter 117 does not apply. The commission has changed the agreed order to ensure that the engine remains in compliance with the 2190 hours/year operating limitation by keeping records relating to operating time.

EPA commented that the Agreed Orders for TXU and SWEPCO needed to specify when the initial compliance testing would be conducted after the modifications required by the Orders are completed.

The commission made the requested changes.

EPA commented that the Agreed Order for Texas Eastman specified a commitment to have engine 11C-9 operate in backup capacity only. In order to verify that the total reduction is met, the order must contain a stipulation regarding monitoring to track the operating time of the engine.

The commission agrees with this comment, and has included a requirement to track operating time in the Texas Eastman Order.

EPA commented that either the SIP narrative or the Agreed Orders for TXU and SWEPCO should include the maximum emission rate in tpy for the NO_x reductions, because the modeling is based on a maximum emission rate in grams per second.

New Table 3.8-1 in the SIP narrative contains the base, future base, and future control case emissions in tpd NO_x, as well as the EGF emission limit and tpd NO_x reduced, for each affected unit. Since the units subject to Agreed Orders were operating at maximum capacity during the modeled ozone episode, the values for the 2007 control case represent the maximum allowable emissions in tpd. However, since the Agreed Orders for TXU and SWEPCO specify maximum allowable emission rates in lb/MMBtu, compliance is established by the lb/MMBtu rates as specified in the Agreed Orders, not a tpd or tpy rate. The values provided in Table 3.8-1, therefore, are provided for information only.

Additionally, the EPA commented on some editorial and grammatical issues in the various Agreed Orders.

The commission agrees with the comment to add the word “and” between “Hwy 149” and “Kodak Blvd” in paragraph 8 and the first paragraph of Part II of the Texas Eastman Order. For both the TXU and SWEPCO Orders, the commission also agrees with adding the word “Company’s” in front of “defenses” in paragraph 6. The commission agrees to include the words “and operate” after the word “install” in paragraphs 15 and 16 of the TXU Order, and in paragraph 19 of the SWEPCO Order.

The commission does not agree that replacing the term “for the three units” in paragraphs 15 and 16 of the TXU Order would be an editorial comment. This could change the emission standard relevant for those units, and the resulting standard would be stricter than the existing state standard in 30 TAC Chapter 117. The commission has not made this change.

The commission has also not changed the SWEPCO Order to include a unit number for the Pirkey Power Plant, because there is only one unit associated with the Pirkey Power Plant.