TCEQ AIR QUALITY PERMIT NUMBERS 102294 and PSDTX1290

APPLICATION BY	§	BEFORE THE
EL PASO ELECTRIC COMPANY	§	
MONTANA POWER STATION	§	TEXAS COMMISSION ON
EL PASO, EL PASO COUNTY	§	
	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review Authorization application and Executive Director's preliminary decision.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk timely received comment letters from Mr. Jeff Robinson, Chief, Air Permits Section, United States Environmental Protection Agency (EPA) Region 6 and the following persons: Mr. Luis A. Acosta, Ms. Paulina Aguilar, Ms. Patty Diane Akers, Ms. Maribel Alarcon, Ms. Elizabeth Aldope, Ms. Arlene Amezcua, Ms. Isabel Arana, Mrs. Luz D. Arellano, Mr. Ricardo Arellano, Mr. Victor Omar Arellano, Mr. Jose Arispe, Ms. Christina Avila, Mr. Andrew Aviles, Mr. Adrian Barreno, Mr. Felix Barreno, Mr. Ken Bauer, Lt. Gaston Baza Jr., Mr. Jim Bearden, Mr. Baltazar Belmar, Mr. David Belmar, Ms. Elia Belmar, Ms. Maria Belmar, Mr. Charles M. Birhanzel, Mrs. Beverly Bombach, Mr. Peter Bombach, Ms. Arlene Briggs, Mr. John Briggs, Ms. Rhonda Bryant, Mr. Thomas Bryant, Mr. Juan A. Bustillos, Ms. Cleotilde Carrasco, Ms. Diana Patsy Carrasco, Ms. Dora Carrasco, Ms. Maria Carrasco, Mr. Rafael Carrasco, Mr. Jesus Carruth, Ms. Marisel Castareda, Mr. Humberto Castaseda, Mr. Adrian Castillo, Ms. Angeles Castillo, Mr. Cesar Castillo, Mr. Sergio Castillo, Mr. Edward Coca, Reverend Keith Cole, Ms. Aida Coleman, Mrs. Donna C. Collins, Ms. Claudia Lorena Contreras. Mr. Efren Eduardo Contreras, Ms. Gabriela Contreras, Ms. Maribel Contreras, Ms. Janie G. Conyers, Mr. Tim Cooper, Mr. Angel Corral, Ms. Perla Corral, Mr. Brad Cryderman, Mr. Jacob Cryderman, Ms. Zulieth Cryderman, Mr. David Davila, Ms. Arcelia De La Garza, Mr. Procopio De La Garza, Ms. Sylvia De La Garza, Mrs. Mayra Del Valle, Mr. Salvador Del Valle, Mr. Salvador Del Valle Jr., Ms. Vanessa Deraps, Mr. Edward Doblado Jr., Ms. Ivette Doblado, Mr. Gabino Duran Jr., Ms. Julia Escobedo, Ms. Gizette Espalin, Ms. Stephanie Espinoza, Mrs. Guadalupe Esqueda, Mr. Louis Evans III, Mrs. Lourdes Falcon, Mr. Pablo Fernandez Sr., Mr. Gorge Figueroa, Mrs. Guillermina Flores, Mr. Omar Flores Jr., Ms. Justine Franco, Ms. Judith Galindo, Ms. Cassandra Garces, Mr. Jacqueline M. Garces, Mr. Rafael M. Garces, Ms. Cyndi Melissa Garcia, Mr. Vicente Garner, Mr. Chris Gill, Mr. Eric Gonzales, Ms. Kristen Nicole Gonzales, Mr. Jose S. Gonzalez, Ms. Mary Gonzalez, Mr. Mike Gonzalez, Mr. Norman Gordon, Mr. Michael David Gossett, Ms. Sheri Ann Vorba Gossett, Mr. David Granado, Mrs. Loreen Lamar Granado, Mr. Bill Guerra-Addington, Ms. Claudia Guerrero, Mr. Andres Gutierrez, Mr. Jose Gutierrez, Ms. Maria D. Gutierrez, Acenael Hernandez, Mr. Rodrigo Hernandez, Mr. Zunico Hernandez, Norely Hidalgo, Mr. E. B. Irving, Ms. Maria Jara, Mr. Terry Jaramillo, Ms. Alma Jauregui, Mr. George Jauregui, Ms. Lizette Jauregui, Mr. Fred Johnson, Mr. Richard M Jones, Mrs. Delia Labrado, Mr. Cristhian Leo, Mr. Edgar Ivan Loera, Mr. Fernando Loera, Mr. Luis Feranando Loera, Mrs. Maria Teresa Loera, Ms. Nabil Guadalupe Loera, Ms. Esmeralda Lopez, Mr. Paul Luevano, Mrs. Heather R. Luna, Ms. Maria D. Macias, Mr. Andres Maldonado,

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 2 of 23

Loree Maldonado, Ms. Debbie Martinez, Mr. Ed Martinez, Mr. Eddie "Little" Martinez, Ms. Hortencia Martinez, Mr. Javier Martinez, Mr. Kevin Martinez, Ms. Ceci Ann Medina, Mrs. Diana Mello, Mr. Steven Mello, Mr. Alejandro Montelongo, Mrs. Fania Montoya, Mrs. Shirley Moreno, Ms. Cynthia Morris, Mr. Glenn Nathan, Reverend Auroa Nava, Ms. Elizabeth Nieves, Ms. Stephanie Ojeda, Ms. Nelly Ortiz, Mr. Jose M Padilla, Mr. Manuel Padilla, Ms. Annette Peebles, Mr. David Pineda Jr., Ms. Bodine F. Porter, Mr. Bruce Porter, Mr. Roy Dale Porter, Mr. Ismael Quiroz, Mr. Benito Alberto Ramos, Mr. Jose C. Ramos Jr., Mr. Daniel Reyes, Ms. Flor Reyes, Ms. Cheyenne Rincones, Mrs. Rosa Rocha, Ms. Blancca Rodriguez, Ms. Elizabeth Rodriguez, Mr. Guillermo Rodriguez, Mr. John Rodriguez, Mr. Jose Rodriguez, Mrs. Maria Elena Rodriguez, Ms. Norma Ronquillo, Mr. Adrian Rubio, Mr. Edgar Rubio, Mr. Keith Rutherford, Mrs. Evelyn Saechao, Mr. Wang Saechao, Ms. Candice Saenz, Dr. Ali Said, Edmundo Salazar, Ms. Aida Salcedo, Vasti Salcedo, Ms. Elvia Saldivar, Ms. Jacqueline Salido, Ms. Bonnie Sanchez, Ms. Luanne Santiago, Mr. Marty Schafer, Ms. Juanita Sias, Mrs. Arlene Solano, Mr. Mario Solano, Ms. Liza Spencer, Mr. Adian Stone, Mrs. Niria Takase, Mr. Michael D. Teague, Mr. Raul Terrazas, Ms. Celia Torres, Mr. Manny Torres, Ms. Martha Torres, Mrs. Michelle Denise Trujillo, Mrs. Terisa Tuialuuluu, Mr. Stephen Valdes, Magali Valenzuela, Mr. Oscar Valenzuela, Ms. Denisse Valles, Carmen Varela, Ms. Olga Vela, Mr. Lazaro Villa, Ms. Lucia Villa, Ms. Ernestina Rivera Villarreal, Mr. Victor Manuel Villarreal, Mr. Timothy West, Ms. Suzana Wolf, Mr. Joel Zamora. and Ms. Irma Zarur.

This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at <u>www.tceq.texas.gov</u>.

BACKGROUND

Description of Facility

El Paso Electric Company has applied to the TCEQ for a New Source Review Authorization under Texas Clean Air Act (TCAA) § 382.0518. This will authorize the construction of a new facility that may emit air contaminants. El Paso Electric Company proposes to construct four simple cycle turbines, each with a maximum base-load electric power output of approximately 100 megawatts (MW). Additionally, the project also includes the installation of two cooling towers, one fire water pump, and auxiliary equipment.

This permit will authorize the applicant to construct four simple cycle turbines with support equipment at the Montana Power Station. Directions to the facility located in El Paso County are as follows: from the El Paso International Airport, head west on Convair Road 0.4 mile; turn left onto Airway Boulevard heading south 0.6 mile, turn left onto US Highway 62/180 (Montana Avenue) heading east; continue east 10.9 miles; stay on the access road at the overpass at Montana and US Highway 659 (Zaragosa Road); make a U-turn at the Zaragosa Road overpass; and turn left onto Montana Avenue for 0.20 miles, facility will be on the right. Contaminants authorized under this permit include sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_X), volatile organic compounds (VOC), sulfuric acid (H₂SO₄), ammonia (NH₃), and particulate matter (PM) including particulate matter with diameters of 10 microns (PM₁₀) or less and 2.5 microns or less (PM_{2.5}).

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 3 of 23

Procedural Background

Before work is begun on the construction of a new facility that may emit air contaminants, the person planning the construction must obtain a permit from the commission. This permit application is for an initial issuance of Air Quality Permit Numbers 102294 and PSDTX1290.

The permit application was received on April 20, 2012, and declared administratively complete on April 26, 2012. The Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) for this permit application was published in English on May 7, 2012, in the *El Paso Times* and in Spanish on May 7, 2012, in *El Diario*. The Notice of Application and Preliminary Decision for an Air Quality Permit was published on October 15, 2012, in English in the *El Paso Times* and in Spanish on October 15, 2012, in *El Diario*. A public meeting was held on December 13, 2012 in El Paso. The notice of public meeting was published in English on December 6, 2012 in the *El Paso Times*. The public comment period ended on December 13, 2012.

COMMENTS AND RESPONSES

COMMENT 1: Commenters are generally concerned about the emissions from the plant. Commenters state that emissions will affect their health and the health of their family members or their friends in the community. Commenters specifically mentioned young children and the elderly. Commenters are concerned about health impacts because of their proximity to the power plant. Commenters state that nearby homes and schools are also vulnerable to the emissions of the plant. Commenters stated they or someone they know has an existing ailment (asthma, allergies, emphysema, etc.) that would be exacerbated by the emissions from the proposed power plant. (Comment Group A)

Commenters asked if the air quality analysis takes into account the current amount of pollution in the air. Commenters are concerned about the existing two power plants and a refinery in El Paso along with pollution from Juarez, Mexico. Commenters stated the plant will make El Paso go into nonattainment (Ms. Mary Torres, Mr. Many Torres, and Mr. Bill Guerra-Addington). Ms. Claudia Guerrero asked if the air quality analysis accounted for variation in the atmospheric conditions that may occur in the area. Ms. Gabriela Contreras asked if any air quality models were submitted and if the proposed power plant is subject to New Source Review (NSR). Mr. Victor Omar Arellano requests information regarding the type of contaminants which will be released to the air.

RESPONSE 1: For permits such as this, potential impacts to human health and welfare or the environment are determined by comparing air dispersion modeling predicted emission concentrations from the proposed plant to appropriate state and federal standards and effects screening levels. The specific health-based standards or guidance levels employed in evaluating the potential emissions include the National Ambient Air Quality Standards (NAAQS), TCEQ standards contained in 30 TAC, and TCEQ Effect Screening Levels (ESLs).

The NAAQS are created by the United States Environmental Protection Agency (EPA) and are set to protect sensitive members of the population such as children, the elderly, and individuals

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 4 of 23

with existing respiratory conditions. The NAAQS, as defined in the federal regulations (40 C.F.R. § 50.2), include both primary and secondary standards. The primary standards are those which the Administrator of the EPA determines are necessary, with an adequate margin of safety, to protect the public health, including sensitive members of the population such as children, the elderly, and individuals with existing lung or cardiovascular conditions. Secondary NAAQS are those which the Administrator determines are necessary to protect the public welfare and the environment, including animals, crops, vegetation, and buildings, from any known or anticipated adverse effects associated with the presence of an air contaminant in the ambient air. Because the emissions from this plant should not cause an exceedance of the NAAQS, air emissions from this plant are not expected to adversely impact land, livestock, crops, or visibility, nor should emissions interfere with the use and enjoyment of surrounding land or water. The Texas Clean Air Act does not give the TCEQ authority to regulate air emissions beyond the direct impacts (inhalation) that the air emissions have to human health or welfare. Therefore, the TCEQ does not set emission limits on the basis that emissions may have impacts (by themselves or in combination with other contaminants or pathways) after being deposited on land or water or incorporated into the food chain. The standards are set for the criteria pollutants: ozone, lead, carbon monoxide, sulfur dioxide, nitrogen dioxide, and respirable particulate matter (PM). "Criteria pollutants" are those pollutants for which a NAAQS has been established.

The combustion of natural gas releases the following criteria pollutants: SO_2 , CO, NO_x , and PM including PM_{10} and $PM_{2.5}$. Additional contaminants that will be released into the air from the proposed facility include H_2SO_4 and NH_3 , both of which are a by-product of using the selective catalytic reduction units for NO_x control, and VOC.

For this specific permit application, appropriate air dispersion modeling was performed using the air quality model AERMOD. The air quality model uses observed meteorological data from nearby weather stations including factors such as wind speed and wind direction when calculating predicted impacts. The air quality analysis was based on data from a surface and upper air meteorological station located in El Paso (Station ID 23044). The likelihood of whether adverse health effects caused by emissions from the proposed facility could occur in members of the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions, was determined by comparing the facility's predicted air dispersion computer modeling concentrations to the relevant state and federal (NAAQS) standards. The permit reviewer used modeling results to verify that predicted ground level concentrations from the proposed facility are not likely to adversely impact off-property receptors. The overall evaluation process provides a conservative prediction that is protective of the public. The modeling predictions were audited by the TCEQ Air Permits Division, and the modeling analysis was determined to be acceptable.

The permit application for the proposed power plant is subject to both state-only (minor) and federal (major) NSR. Emissions of contaminants that are below the significance levels listed in Table 1 of 30 TAC §116.12(18)(A) were subject to and reviewed under minor NSR rules. For emissions of contaminants above the significance levels, the application was subject to and reviewed under major NSR rules. The NAAQS modeling results are below:

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 5 of 23

Modeling Results for PSD De Minimis Analysis in Micrograms Per Cubic Meter (µg/m3)				
Pollutant	Averaging Time	GLCmax (μg/m³)	De Minimis (µg/m³)	
PM ₁₀	24-hr	1.67	5	
PM ₁₀	Annual	0.16	1	
PM _{2.5}	24-hr	1.19	1.2	
PM _{2.5}	Annual	0.14	0.3	
NO ₂	1-hr	7.49	7.5	
NO ₂	Annual	0.15	1	
СО	1-hr	56.52	2000	
СО	8-hr	20.89	500	

Modeling Results for Minor NSR De Minimis				
Pollutant	Averaging Time	GLCmax (μg/m³)	De Minimis (µg/m³)	
SO ₂	1-hr	0.57	7.8	
SO ₂	3-hr	14.44	25	
SO ₂	24-hr	0.62	5	
SO ₂	Annual	0.03	1	

The Significant Impact Level (SIL) of an air contaminant is what is defined by the EPA as a concentration below which the air quality is not anticipated to degrade due to these emissions. TCEQ generally refers to the SIL as de minimis. Since all predicted impacts listed above were below the PSD De Minimis levels, the proposed facility is presumed to not cause or contribute to an exceedance of the NAAQS of the listed contaminants.

Emissions of non-criteria pollutants from combusting pipeline quality natural gas at power plants such as the proposed El Paso Electric Montana Station do not require an effects review by

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 6 of 23

the TCEQ Toxicology Division.¹ Therefore, the TCEQ permit reviewer compared the proposed site-wide ammonia emissions to the TCEQ Effects Screening Levels (ESLs) for ammonia. ESLs are constituent-specific guideline concentrations used in TCEQ's effects evaluation of constituent concentrations in air. These guidelines are derived by the TCEQ Toxicology Division and are based on a constituent's potential to cause adverse health effects, odor nuisances, and effects on vegetation. Health-based screening levels are set at levels lower than levels reported to produce adverse health effects, and as such are set to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. Adverse health or welfare effects are not expected to occur if the air concentrations (GLCmax) predicted to occur at a sensitive receptor which are at or below the ESL would not be expected to cause adverse effects. However, if an air concentration of a constituent is above the screening level, it is not necessarily indicative that an adverse effect will occur, but rather that further evaluation is warranted. Because the modeling results were below ten percent of the ESL for ammonia no negative impact to off-property receptors is indicated.

Minor NSR Site-wide Modeling Results for Health Effects				
Pollutant	Averaging Time	GLCmax (µg/m³)	ESL (µg/m³)	
ammonia	1-hr	6.41	170	

The applicant proposed a small diesel fuel tank for the firewater pump whose proposed emissions would have a small additional impact with regard to diesel fuel vapor and the diesel fuel tanks adjacent to the site. The additional impact is not likely to adversely impact offproperty receptors.

As set forth in Section 382.052 of the Texas Clean Air Act (TCAA), the TCEQ considers possible adverse health effects on individuals attending schools which are located within 3,000 feet of a facility or proposed facility. A protectiveness review must be conducted for all contaminants emitted. The maximum concentrations are evaluated at the property line, at the nearest off-property receptor, and at any schools located within 3,000 feet of the proposed facilities. A site review conducted by the TCEQ El Paso Regional office and an analysis of satellite photos indicated that there was no school within 3,000 feet of the facility.

COMMENT 2: Ms. Maria D. Macias requested that further testing be performed on NO_x and CO emissions and for the community to be made aware of the results.

RESPONSE 2: As described in Response 1 above, the technical review of the application was conducted in accordance with applicable law and TCEQ rules and guidance. Additionally, the draft permit contains several special conditions that require stack sampling and continuous monitoring of pollutants. Special Condition No. 12 requires initial stack sampling of the pollutants to be emitted by the proposed facilities. Continuous monitoring systems are required

¹ See the TCEQ guidance document entitled Modeling and Effects Review Applicability: How to Determine the Scope of Modeling and Effects Review for Air Permits, Appendix B (Toxicology Emissions Screening List).

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 7 of 23

for NO_x and CO by Special Condition No. 13. Records demonstrating compliance with the permit conditions must be kept for five years and made available to the TCEQ upon request as required by Special Condition No. 18 of the draft permit. Direct monitoring of ammonia is also required by Special Condition No. 14. Fuel usage monitoring required by Special Condition No. 15 will be used to demonstrate compliance with the other pollutants listed on the Maximum Allowable Emission Rate Table of the draft permit.

COMMENT 3: Ms. Irma Zarur would like to view the impact study results. Ms. Christina Avila requested more information on this permit.

RESPONSE 3: In addition to the information provided in Response 1 above, the draft permit and other updates to the application are kept in a file maintained by the permit engineer reviewing the application until the permit is issued as well as at the TCEQ Regional Office. During the permit review, information regarding the application can be obtained from the TCEQ permit reviewer, Mr. Sean O'Brien by calling (512) 239-1250 or the TCEQ El Paso Regional Office at (915) 834-4949.

COMMENT 4: Commenters are concerned emissions from the proposed plant will cause contamination of the area's soil or groundwater. (Comment Group B) Mr. Peter Bombach and Mrs. Beverly Bombach questioned where the applicant would get the water needed to operate the plant and were concerned about retention ponds and potential seepage into the ground. Mr. Mario Solano stated construction of the facilities on the proposed site will allow water to pool on the proposed site or adjacent land allowing mosquitoes to breed.

RESPONSE 4: This permit, if granted, will govern the control and abatement of air contaminant only. The TCAA does not give the TCEQ authority to regulate air emissions beyond the direct impacts (inhalation) that the air emissions have to human health or welfare. Water use and water quality are outside the scope of this authorization. However, as described in Response 1 above, the Secondary NAAQS are set to protect public welfare and the environment, including animals, crops, vegetation, and buildings, from any known or anticipated adverse effects associated with the presence of an air contaminant in the ambient air.

The granting of an air authorization does not relieve the applicant from complying with all other regulations. The applicant must comply with all applicable state and local regulations including any requirements regarding mosquito abatement. Depending on the nature of the operations, the applicant may be required to apply for separate authorizations.

COMMENT 5: Commenters state that El Paso Electric should consider other forms of power generation such as solar or not rely on fossil fuels. (Mr. Bill Guerra-Addington and Mr. Alejandro Montelongo). Mr. Benito Alberto Ramos requests that the facility be designed to minimize emissions. Mr. Adrian Castillo stated that the plant is not using the best technology to control emissions.

RESPONSE 5: The TCEQ does not have the regulatory authority to require one type of facility design over another so long as an applicant can demonstrate that they meet the requirements of a particular authorization. The TCAA and TCEQ rules require an evaluation of air quality permit applications to determine whether adverse effects to public health, general welfare, or physical

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 8 of 23

property are expected to result from a facility's proposed emissions. As part of the evaluation of applications for new or amended permits, the permit reviewer identifies all sources of air contaminants at the proposed facility and assures that the facility will be using the best available control technology (BACT) applicable for the sources and types of contaminants emitted. The BACT is based upon control measures that are designed to minimize the level of emissions from specific sources at a facility. BACT requires technology that best controls air emissions with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions. TCAA § 382.0518; 30 TAC § 116.111.

El Paso Electric Company represented that BACT will be used at the proposed site. Use of appropriate control measures will decrease the amount of air contaminants emitted into the atmosphere by this facility. The primary control measures applied to this facility are selective catalytic reduction units for NO_x control and oxidation catalyst for CO and VOC control. The use of natural gas controls PM and SO_2 . A search of the RBLC showed no other form of control is used for PM and SO_2 from pipeline quality natural gas fired combustion units.

COMMENT 6: Page 5, No. 13 - The draft permit only requires continuous ongoing monitoring for nitrogen oxides (NO_x) and CO. EPA recommends that the permit also establish ongoing periodic monitoring frequencies or work practice standards that will be practically enforceable for particulate matter (PM), since PSD is triggered for this pollutant. (EPA)

RESPONSE 6: Continuous ongoing monitoring of the fuel consumption of the turbines is required by the draft permit. All other pollutants with the exception of NO_x and CO require periodic monitoring because no additional controls are required for any other pollutant. The TCEQ required the Applicant to use several methods to demonstrate compliance with emissions authorized on the MAERT. First, the monitoring of fuel consumption allows applicants to employ engineering calculations to demonstrate compliance. In addition, the CO continuous emissions monitor is a surrogate for PM for gas-fired facilities, which was previously proposed as periodic monitoring in the stationary combustion turbine and reciprocating internal combustion engine National Emission Standards for Hazardous Air Pollutants (NESHAPs) on the understanding that compliance with CO emission limits in a permit will indicate good combustion and compliance with PM limits. By limiting the allowable fuel to pipeline quality natural gas (*see* Special Condition No. 7.A. of the draft permit) PM emissions are expected to be minimal and further methods of monitoring, in addition to those discussed above, would be unnecessary to demonstrate compliance with the PM emission limits in the MAERT.

COMMENT 7: Page 5, Section VI - The PDS lists the VOC Best Available Control Technology (BACT) emission rate at 2 parts per million volumetric dry (ppmvd) corrected to $15\% O_2$. However, the draft permit does not reflect this emission rate or the associated monitoring and recordkeeping requirements. Please include these conditions in the permit to ensure compliance with the emissions limitation. (EPA)

RESPONSE 7: The draft permit does not specifically reference the 2 ppmvd at $15\% O_2$ emission rate for VOC because it is not directly and continuously monitored. The draft permit requires an initial demonstration of compliance with a stack test and ongoing demonstration of compliance by periodic monitoring, including fuel usage monitoring. The emission limit in the MAERT for VOC for each turbine was based on the turbine's maximum exhaust flow rate and

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 9 of 23

the 2 ppmvd at 15% O_2 VOC BACT limit. During the initial stack test, the permittee will be required to test the turbine at or above 90% of base load to demonstrate compliance with this MAERT limit. This will demonstrate that the 2 ppmvd at 15% O_2 VOC BACT limit was achieved. Ongoing compliance with VOC BACT will be demonstrated through the monitoring of fuel usage and engineering calculations. Any future stack compliance testing, if required, must also demonstrate compliance with this limit.

COMMENT 8: Page 2, No. 5.B. - The draft permit establishes a carbon monoxide (CO) emission rate of 6.0 parts per million by volume (ppmvd) corrected to 15% O₂ while operating the combustion turbines in simple cycle mode. However, a number of permitting actions in the RACT/BACT/LAER Clearinghouse (RBLC) include more stringent limits. For example, the State of New Jersey Department of Environmental Protection's permit for the Vineland Municipal Electric Utility, Howard Down Station, includes a CO emissions rate of 5.0 ppmvd @ 15 % O₂ in simple cycle mode. Therefore, please explain in the permit record why this facility cannot achieve a more stringent emissions rate for CO, or please revise the BACT limit to reflect the limits at these similar facilities. (EPA)

RESPONSE 8: A review of the RBLC for Vineland Municipal Electric Utility shows the chosen turbine was a Rolls Royce Trent 60 (approx. 60 MW) which is of aeroderivative design like the GE LMS100 (approx. 100 MW) proposed by El Paso Electric. However, the Rolls Royce turbine uses dry low NO_x technology while the GE turbine uses water injection as NO_x control in addition to SCR. Water injection can achieve similar NO_x control as dry low NO_x technology but typically CO emissions are slightly higher due to differences in combustion within the turbine when water is injected into the combustor. The GE LMS100 is equipped with an oxidation catalyst which is the maximum level of control for CO. Given the use of oxidation catalyst, the TCEQ determined that El Paso Electric proposed the maximum level of control for CO and further control is not technically feasible.

COMMENT 9: Page 1, No. 5.A.i., ii., and iii. - BACT emission limitations apply at all times and may not be "excluded" as stated in the permit condition during periods of maintenance, startup, and shutdown (MSS). To the extent TCEQ seeks to exempt these emissions from the primary BACT emissions limitations, the TCEQ should have an on-the-record analysis in the PDS demonstrating that compliance with the normal BACT limits is infeasible during MSS and develop an alternative BACT limitation for periods of MSS. In addition, please explain how the current "excluded" permit condition comports with the statement in the PDS, Page 2, Section III, that planned startup and shutdown emissions are authorized by the permit through short term hourly emission limits and normal operation annual emissions. (EPA)

RESPONSE 9: The TCEQ agrees that BACT emissions limitations apply at all times during the operations of any authorized source. For permit 102294, separate BACT for MSS was established as a time limitation in Special Condition Nos. 5.D. and 5.E. and as a mass emission rate limitation in the Maximum Allowable Emission Rate Table (MAERT). Startup and shutdown are therefore not included in the normal operation limits of the turbines because their inclusion would not represent BACT for the majority of the turbines' actual operation when the SCR system is in operation. Specific startup and shutdown BACT for the turbines is discussed on page 2 of the PDS in the section entitled "Maintenance, Startup, and Shutdown." The only excluded emissions are the CEMS measured concentration of NO_x when calculating compliance

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 10 of 23

with the 3 hour average NO_x concentration limit in Special Condition No. 5.A during certain time periods detailed in Special Condition No.5. The MAERT lb/hr and tpy limits referenced in Section III of the PDS do not exclude any periods of operation of the turbines.

COMMENT 10: Maximum Allowable Emission Rates Table (MAERT) - The draft permit establishes a short term particulate matter (PM_{10} and $PM_{2.5}$) limit of 6.0 lbs/hr while operating the combustion turbines in simple cycle mode. However, a number of permitting actions in the RACT/BACT/LAER Clearinghouse include more stringent short term limits that are defined as BACT. For example, the State of Wyoming Department of Environmental Quality permitted the Black Hills Power, Cheyenne Prairie Generating Station with a PM short term emission limit for BACT of 4.0 lbs/hr. Therefore, please explain in the permit record why this facility cannot achieve a more stringent short term emission limit for PM_{10} and $PM_{2.5}$ or revise the BACT limit to reflect the limits at these similar facilities. Regarding footnote 4 in the MAERT, please clarify whether the short term limit includes start up and shut down emissions. (EPA)

RESPONSE 10: A review of the Cheyenne Prairie Generating Station permit application shows the chosen turbine was a GE LM6000 (approx. 40 MW) which is less than half the size of the GE LMS100 (approx. 100 MW) proposed by El Paso Electric. This shows that El Paso Electric is proposing lower emissions on a pound per megawatt basis than Black Hills Power. However, both the Cheyenne permit and the Montana Station draft permit allowable particulate emissions are based on the manufacturer's guarantee which takes into account the knowledge and experience of the equipment manufacturer. Given the lack of any technically feasible control devices for particulate matter from a gas-fired turbine, more control of particulate matter emissions from these turbines was not considered BACT.

The MAERT, in footnote 4, indicates that startup and shutdowns emissions are subject to the limits of the MAERT. If a higher emission rate is not listed for a particular pollutant for startup or shutdown (SS), the applicant represented that emissions during SS are no higher than non-SS operation.

COMMENT 11: Full Impact Analysis, PSD Increment Analysis - The applicant conducted a cumulative PM_{2.5} NAAQS analysis for the 24-hour averaging period using AERMOD. The cumulative analysis was conducted for primary $PM_{2.5}$ only and did not address secondary $PM_{2.5}$. Specifically, the applicant's PM_{2.5} NAAQS analysis did not include an assessment of the potential secondary PM_{2.5} impacts from the proposed project or the surrounding background sources included in the modeling analysis. Because the proposed facility emits $PM_{2.5}$ precursors, the potential contribution of the proposed project to secondary $PM_{2.5}$ impacts should be addressed. AERMOD is the current preferred dispersion model for near-field PM_{2.5} modeling, but the model does not account for secondary formation of PM_{2.5}. Therefore, any secondary contribution of emissions from the proposed facility or other modeled emission sources is not explicitly accounted for in the air quality analysis. The analysis should be revised to provide some assessment of the potential impacts from secondary PM_{2.5} formation on the cumulative NAAQS analysis resulting from the facility's proposed PM_{2.5} precursor emissions, or the permit record should be updated to include a rationale as to why the NAAQS analysis does not assess such secondary impacts. The secondary PM_{2.5} assessment may include a determination that the level of precursor emissions would bring about negligible contributions to secondarily-formed PM_{2.5} or that the expected locations of potential secondary PM_{2.5} impacts are or are not correlated with

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 11 of 23

the location(s) of modeled high primary $PM_{2.5}$ impacts to determine if the secondary impacts will significantly contribute to $PM_{2.5}$ concentrations where the predicted high primary $PM_{2.5}$ impacts occur. (EPA)

RESPONSE 11: The applicant followed EPA guidance in conducting the $PM_{2.5}$ analyses, including the March 23, 2010 memorandum "Modeling Procedures for Demonstrating Compliance with $PM_{2.5}$ NAAQS" from Stephen D. Page, the EPA Director of the Office of Air Quality Standards and Planning (Page memo). The Page memo provides information on the model limitations and how to determine background concentrations and combine model results and monitored concentrations.

 $PM_{2.5}$ is either directly emitted from a source (primary emissions) or formed through chemical reactions (secondary formation). Secondary $PM_{2.5}$ is formed through the emissions of non-particulates such as SO_2 and NO_x that transform into $PM_{2.5}$ in the atmosphere through chemical reactions. As noted on page 9 of the Page memo, the current preferred near-field air dispersion model, AERMOD, is not capable of modeling secondary formation of $PM_{2.5}$ and any secondary contribution is not explicitly accounted for. The Page memo continues, "if the facility emits significant quantities of $PM_{2.5}$ precursors, some assessment of their potential contribution to cumulative impacts as secondary $PM_{2.5}$ may be necessary." El Paso Electric's proposed emissions of SO_2 are less than the Significant Emission Rate (SER) of 40 tons per year (TPY) and would not be expected to result in significant secondary formation of $PM_{2.5}$. El Paso Electric's proposed emissions of NO_x (96 TPY) are above the NO_x SER (40 TPY).

Secondary $PM_{2.5}$ is formed as emissions of non-particulates, such as SO_2 and NO_x , transform through chemical reactions, which occur in the atmosphere gradually over time (hours or days depending on atmospheric conditions and other variables). The Page memo notes, "[i]n determining whether such contributions may be important, keep in mind that peak impacts due to facility primary and secondary $PM_{2.5}$ are not likely to be well-correlated in space or time..." This is important because it says that secondary impacts are not generally going to affect primary impacts. Therefore, secondary $PM_{2.5}$ impacts are expected to occur at some distance from the source of its gaseous emission precursors. This contrasts to the areas of highest predicted primary $PM_{2.5}$ impacts, which occur at the property line and within minutes of being emitted. Because the transformation of NO_x to secondary $PM_{2.5}$ is slow, only a small portion of the NO_x emissions can convert to $PM_{2.5}$ within the areas of highest predicted primary $PM_{2.5}$ is that the NO_x is highly dispersed before it becomes $PM_{2.5}$, and any secondary $PM_{2.5}$ impacts from the potential 96 TPY of NO_x would be expected to be considerably smaller than the impacts from the proposed 62 TPY of directly emitted $PM_{2.5}$.

The southern location of the proposed project is an additional factor that minimizes the impact of secondary $PM_{2.5}$ from NO_x emissions. Only a small portion of the NO_x emissions would be expected to convert to secondary $PM_{2.5}$ in the form of ammonium nitrate. In warmer southern latitudes, very little ammonium nitrate exists as solid particles. The dissociation constant for ammonium nitrate increases by more than two orders of magnitude (more than a factor of 100) from 10°C (50°F) to 30°C (86°F). For example at 86°F and 30% relative humidity, essentially all ammonium nitrate evaporates, thus not contributing to PM mass. (*Atmospheric Chemistry and Physics*, John H. Seinfeld and Spyros N. Pandis, 1997). Data from El Paso area monitors

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 12 of 23

with $PM_{2.5}$ speciation data demonstrates the ammonium nitrate portion averages 0.35 μ g/m³, or about 3% of the average level of $PM_{2.5}$.

The TCEQ Air Dispersion Modeling Team (ADMT) performed an analysis assessing the potential secondary $PM_{2.5}$ impacts from the proposed project and the surrounding background sources to verify that the proposed project is protective of the $PM_{2.5}$ NAAQS and Increments. The analysis conservatively assumed 100 % conversion of NO₂ to (NH₄)NO₃. This conservative approach is documented in Appendix E of the January 7, 2012 report from National Association of Clean Air Agencies (NACAA) titled, $PM_{2.5}$ Modeling Implementation for Projects Subject to National Ambient Air Quality Demonstration Requirements Pursuant to New Source Review. As noted in the report, this approach produced excessively high modeled concentrations. The report can be found at:

http://www.epa.gov/ttn/scram/10thmodconf/review_material/01072011-NACAAPM2.5ModelingWorkgroupReport-FINAL.pdf.

For the analysis, the ADMT calculated a 24-hour NO₂ predicted concentration using the 1-hour NO₂ AERMOD input files provided in the applicant's NO₂ analysis. The 24-hour NO₂ predicted concentration is 3 μ g/m³ (micrograms per meter cubed). The annual predicted NO₂ concentration is 0.15 μ g/m³ and was taken from the applicant's annual NO₂ modeling demonstration.

Based on the formula in the NACAA report, $1 \ \mu g/m^3$ of NO₂ could potentially form 1.7391 $\mu g/m^3$ of (NH₄)NO₃. Using this ratio, the 24-hour and annual potential secondary formation from the proposed source would be 5.22 $\mu g/m^3$ and 0.26 $\mu g/m^3$, respectively. Adding this amount to the predicted primary PM_{2.5} concentrations and to a representative background concentration indicate that the proposed project will not cause a NAAQS exceedance. In addition, adding the predicted secondary impacts to the cumulative increment analysis conducted by the applicant will not result in an increment exceedance. The results are summarized in the following tables.

Pollutant	Averaging Time	Project GLCmax (µg/m³)	Secondary Formation from Project (µg/m ³)	background (µg/m³)	Total Predicted Concentration (µg/m ³)	NAAQS
PM _{2.5}	24-hr	1.19	5.22	26	32.4	35
PM _{2.5}	Annual	0.14	0.26	9.6	10	15

PM_{2.5} NAAQS Analysis

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 13 of 23

Pollutant	Averaging Time	GLCmax (μg/m³)	Secondary Formation from Project (µg/m ³)	Total Predicted Concentration (µg/m ³)	Increment (µg/m³)
$PM_{2.5}$	24-hr	1.24	5.22	6.46	9
PM _{2.5}	Annual	0.15	0.26	0.41	4

PM_{2.5} Increment analysis

The Page memo states representative background monitoring data for $PM_{2.5}$ should adequately account for secondary contribution from background sources. In the analysis, the ADMT included background concentrations from an ambient air monitor located in the same county as the proposed project. The 24-hour and annual $PM_{2.5}$ background concentrations were obtained from the EPA AIRS monitor 481410037 located at 250 Rim Rd, El Paso, El Paso County. As discussed in the Page memo, "due to the important role of secondary $PM_{2.5}$, background monitored concentrations of $PM_{2.5}$ are likely to be more homogeneous across the modeling domain in most cases, compared to other pollutants." Because of this relative homogeneity of $PM_{2.5}$ concentrations, a monitor located in the same county as the proposed source is representative of the proposed project location and should adequately account for secondary contribution from background sources. In addition, out of the monitors reported to EPA, monitor 481410037 had the highest 2011 design concentration for the El Paso Area. The results of this conservative analysis verify the applicant's conclusion that the proposed project is protective of the $PM_{2.5}$ NAAQS and Increments.

COMMENT 12: Ozone Impact Analysis - The applicant indicated that the proposed emissions increases for the proposed facility do not require that an ozone impacts analysis be conducted. However, Page 3 of the PDS indicates that the proposed emissions increases in NO_x for the proposed facility are 96.37 tons per year (tpy), which is greater than the 40 tpy significant level specified in the PSD regulations. Therefore, we do not agree that an ozone impacts analysis is not required for the proposed facility. As we noted in our final approval of the Texas Infrastructure SIP on December 28, 2011: "PSD regulations require an ambient impact analysis for ozone when precursor emissions of VOC and/or NO_x are projected to equal or exceed the 40 tpy threshold levels. We note that 52.21(i) and 51.166(i) are potentially applicable in this context. Footnote 1 to sections 51.166(i)(5)(i) and 52.21(i)(5)(i) of EPA's regulations says the following: "No de minimis air quality level is provided for ozone. However, any net emission increase of 100 tpy or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of air quality data." EPA previously included a similar note in a guidance listing Significant Impact Levels in the 1990 NSR Workshop Manual (Draft, October 1990), page C.28, footnote b on this page says the following with respect to the applicable one-hour ozone NAAQS: "No significant ambient impact concentration has been established. Instead, any net emissions increase of 100 tons per year of VOC subject to PSD would be required to perform an ambient impact analysis." Based on these statements, this 100 tpy value has been used by some permitting authorities in a manner similar to a SIL to assess whether a detailed air quality analysis should be conducted for ozone in a similar fashion to the "First" method of using a SIL discussed above. While these statements suggest a less rigorous analysis may be appropriate for sources emitting less than

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 14 of 23

100 tpy of these precursors (and greater than or equal to 40 tpy), they have not been revisited by EPA since the promulgation of the 8-hour ozone NAAQS (which included revisions to include NOx as an ozone precursor). EPA is not categorically concluding that every source emitting less than 100 tpy of NO_x or 100 tpy of VOCs will not cause or contribute to a violation of the current ozone NAAQS. EPA believes it unlikely a source emitting below these levels would contribute to such a violation of the 1997 8-hour ozone NAAQS, but consultation with an EPA regional office should still be conducted in accordance with section 5.2.1.c. of Appendix W when reviewing an application for sources with emissions of these ozone precursors below 100 tpy." (76 FR 81385) Therefore, the applicant should provide an ambient air quality analysis for the proposed facility. As EPA Region 6 has stated previously in comment letters to TCEQ, TCEQ should consult with EPA Region 6 on a case-by-case basis for determining the appropriate techniques in developing an adequate ozone impact analysis. Furthermore, a modeling protocol, where required, should be developed and agreed upon by EPA Region 6, the TCEQ, and the applicant to ensure that the analysis conducted will conform to the recommendations, requirements, and principles of the EPA's Guideline on Air Quality Models (GAQM), published as Appendix W of 40 CFR Part 51. In this specific case, an evaluation of the nearest ozone monitor Design Values would be an appropriate starting point and if those values are well below the 2008 8-hour ozone standard (75 ppb), then sharing of that information and the size of NO_x and VOC emission increase could be considered in a discussion of the need to do further analysis. We look forward to working with TCEQ and the applicant in appropriately addressing this requirement. (EPA)

RESPONSE 12: The TCEQ disagrees that an ozone analysis is required. At the request of the TCEQ, the applicant submitted an air quality analysis protocol to EPA Region 6 on July 6, 2012, which included justification as to why an ozone analysis is not required. The TCEQ ADMT requested confirmation and comments on the protocol from EPA Region 6 on July 6, 2012. EPA Region 6 confirmed receipt of the protocol on July 12, 2012. However, EPA Region 6 did not provide any comments on the protocol.

The EPA and TCEQ use mass emission rate "significance levels" to determine if the emissions from a new or modified stationary source must apply for a federal permit. If the net emissions increase meets or exceeds a significance level for a pollutant, a federal NSR review is required. This review includes an evaluation of BACT and an air quality analysis. For most criteria pollutants, EPA and TCEQ use ambient air concentration thresholds to determine the scope of the air quality analysis. EPA refers to these thresholds as "significance levels" and "significant impact levels" (SILs), while the TCEQ refers to them as "de minimis impacts." As noted in the comment, the EPA 1990 NSR Workshop Manual (Draft, October 1990) contains a table identifying significant impact levels. The table contains the following footnote in reference to ozone:

No significant ambient impact concentration has been established. Instead, any net emissions increase of 100 tons per year of VOC subject to PSD would be required to perform an ambient impact analysis. A similar footnote is listed at 40 CFR 52.21(i)(5)(i)(f) and 40 CFR 51.166 (i)(5)(i)(f) which reads: No *de minimis* air quality level is provided for ozone. However, any net emissions increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of air quality data.

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 15 of 23

The TCEQ has long interpreted the footnote and guidance to indicate an ozone analysis is only required when an application has any net emissions increase of 100 tpy of VOC or NO_X. Additionally, EPA has in the past, during modeling conferences (<u>http://cleanairinfo.com/modelingworkshop/presentations/Single_Source_Snyder.pdf</u>), indicated that PSD permits applications with over 100 tpy of precursors need to conduct an impact analysis for ozone.

Based on the wording of 40 CFR 52.21(i)(5)(i)(f) and 40 CFR 51.166 (i)(5)(i)(f), as well as the SIL guidance listed in the 1990 NSR Workshop Manual, the El Paso Electric project did not require an ozone analysis because the project did not have an increase of 100 tpy of NO_x or VOC. Requiring an analysis for ozone at predicted emission levels lower than those stated in regulation should be accomplished through a formal rulemaking process that is subject to public comment.

COMMENT 13: C1. Page 3, Section V - The draft permit proposes to apply PSD requirements to the El Paso Electric project based on the position that the proposed facility will be a new major source of greenhouse gases (GHGs). The PDS specifically states: "the project is a major source for greenhouse gas emissions and therefore TCEQ is permitting any significant amounts of the other criteria pollutants. The project emissions for nitrogen oxides (NO_x) , carbon monoxide (CO), and particulate matter, including particulate matter less than 10 microns and less than 2.5 microns in diameter $(PM/PM_{10}/PM_{2.5})$ were above the Prevention of Significant Deterioration (PSD) major modification significance level; therefore, PSD review was triggered for these pollutants and full modeling and impacts analyses were performed." EPA requests further clarification on the basis of legal authority for TCEQ to apply Texas' SIP-approved PSD program regulations to a source such as El Paso Electric, which is a major source only for its GHG emissions. EPA's understanding is that the approved Texas PSD program provisions require that "[e]ach proposed new major source or major modification in an attainment or unclassifiable area shall comply with the requirements of this section." 30 TAC § 116.160(a). The requirements of this section include PSD permitting requirements incorporated by reference from 40 C.F.R. § 52.21. 30 TAC § 116.160(c)(2). Applicable definitions are those reflected in section 116.12 of Title 30 of the Texas Administrative Code and select provisions incorporated by reference from 40 C.F.R. § 52.21(b). 30 TAC § 116.160(c)(1). Specifically, the Texas Administrative Code defines "major stationary source" as follows: Any stationary source that emits, or has the potential to emit, a threshold quantity of emissions or more of an air contaminant... for which a national ambient air quality standard has been issued. [T]he major source thresholds for prevention of significant deterioration pollutants are identified in 40 Code of Federal Regulations (CFR) § 51.166(b)(1). A source that emits, or has the potential to emit a federally regulated new source review pollutant at levels greater than those identified in 40 C.F.R. § 51.166(b)(1) is considered major for all prevention of significant deterioration pollutants. Since El Paso Electric does not have the potential to emit at least 250 tons per year of any pollutant for which a national ambient air quality standard has been issued, it does not appear to qualify as a "major stationary source" under this definition. To qualify as a major stationary source under this definition, El Paso Electric would have to emit a "federally regulated new source review pollutant" above the applicable thresholds in 40 C.F.R. § 51.166(b)(1). In an August 2, 2010 letter to EPA, the TCEQ Chairman and Attorney General of Texas wrote the following:

Texas' stationary source permitting program encompasses all "federally regulated new source review pollutants," including "any pollutant that otherwise is subject to regulation under the [Federal Clean Air Act]." 30 Tex. Admin. Code § 116.12(14)(D). This delegation of legislative authority to the EPA is limited solely to those pollutants regulated when Texas Rule 116.12 was adopted (1993) and last amended (2006). As the Texas Supreme Court has explained, "The general rule is that when a statute is adopted by specific descriptive reference, the adoption takes the statute as it exists as that time, and the subsequent amendment thereof would not be within the terms of the adopting act." *Trimmer v. Carlton*, 296 S.W. 1070 (1927). Thus, in order for Texas Rule 116.12 to pass constitutional muster, it must be limited to adopting by reference the definition of "subject to regulation" in existence when Rule 116.12 was last amended in 2006. In other words Texas Rule 116.12 cannot delegate authority to EPA to define "subject to regulation" in 2010 to include pollutants that were not "subject to regulation" in 2006.

Given this view of the scope of the term "federally regulated new source review pollutant" under Texas law, please clarify how El Paso Electric qualifies as a major source subject to section 116.160(a) of Texas regulations. Furthermore, to the extent that TCEQ interprets section 116.160 to cover sources such as El Paso Electric, please explain how TCEQ is able to limit the scope of section 116.160 and the definition of "major stationary source" in section 116.12(17) to cover sources that emit only GHGs over the PSD applicability levels identified in 40 C.F.R. §§ 51.166(b)(1) and (48) or how TCEQ is otherwise prepared to address the increased burden of issuing PSD permits under section 116.160 to all sources with GHG emissions greater than the thresholds in 40 C.F.R. § 51.166(b)(1). As you are aware, EPA Region 6 takes the view (based on the interpretation of Texas Law reflected in the August 2, 2010 letter described above) that EPA must implement a FIP to ensure that the sources in Texas have a means to satisfy the PSD requirements for GHGs if TCEQ cannot do so. EPA continues to support programmatic mechanisms that can maximize the opportunity for the state to assume as much of the permitting responsibilities as possible. See 75 FR 82246, 82251 (Dec. 30, 2010). Thus, while EPA would support SIP revisions to allow withdrawal of the GHG PSD FIP, EPA needs further clarification of your interpretation of Texas law before we can support TCEQ' s position, as evidenced in this draft permit, to issue PSD permits covering criteria pollutant emissions from sources such as El Paso Electric that are major only for GHGs. (EPA)

RESPONSE 13: The Environmental Protection Agency (EPA) Region 6 (R6) has advised PSD greenhouse gas (GHG) applicants on its website that for those projects triggering the need for a PSD permit solely because of GHGs, EPA will be responsible for permitting the increases of non-GHG pollutants if they are "significant" as defined at 40 CFR § 52.21(b)(23). As a result of this statement, the TCEQ entered into a dialogue with EPA R6 to resolve the potential "dual authorization" associated with these non-GHG emissions. The dual authorization circumstance arises because under state law a preconstruction permit is likewise required for these non-GHG air contaminants. EPA R6 has indicated that if TCEQ can provide the legal basis for TCEQ authorizing the "traditional" pollutants at or above the significance levels associated with a "PSD for GHG only" permit application, EPA will process and review only the GHG portion of the PSD permit application.

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 17 of 23

Section 382.002 of the TCAA provides that it is "[t]he policy of this state and the purpose of [Texas Health and Safety Code (THSC) Chapter 382] to safeguard the state's air resources from pollution by controlling or abating air pollution and emission of air contaminants, consistent with the protection of public health, general welfare, and physical property, including the esthetic enjoyment of air resources by the public and the maintenance of adequate visibility." The TCAA defines a "Federal source" to include "a source required to have a permit under Part C ... of Title I of the Federal Clean Air Act." TEX. HEALTH & SAFETY CODE § 382.003(7)(E). The TCEQ also has the "powers necessary or convenient to carry out its responsibilities, pursuant to TCAA § 382.011, General Powers and Duties. The TCAA further provides that the commission may issue a permit "to construct a new facility or modify an existing facility that may emit contaminants and to assist in fulfilling this authorization may issue "other permits as necessary." TEX. HEALTH & SAFETY CODE § § 382.051(a) and (b)(11). The TCAA requires that [b]efore work is begun on the construction of a new facility or modification of an existing facility that may emit air contaminants, the person planning the construction or modification must obtain a permit or permit amendment from the commission." TEX. HEALTH & SAFETY CODE § 382.0518.

TCEQ rules likewise require that a permit to construct must be obtained by any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state. 30 TAC § 116.110. In order to be granted a permit, an application must include certain information, including information which demonstrates that emissions from the facility will be protective of public health and welfare and that BACT will be evaluated for and applied to all facilities subject to the TCAA. 30 TAC § 116.111. TCEQ rules further specify that "if a proposed facility is located in an attainment area, it shall comply with all applicable requirements in this chapter concerning PSD review." *Id.* PSD requirements are set forth in Section 116.160. The owner of a facility or the operator is authorized to act for the owner is responsible for complying with Section 116.111.

In the situation of a "PSD for GHG only" project, permit applicants have expressed a willingness to voluntan1y undergo PSD review by TCEQ for those non-GHG emissions meeting the significance levels in 40 CFR § 52.21. Because state law and the above TCEQ SIP-approved rules require authorization to construct for any new or modified facilities, the TCEQ may, upon request of an applicant, determine compliance with PSD requirements for those non-GHG emissions at or above 52.21 significance levels and issue a permit for these emissions pursuant to THSC § § 382.051(b) (11) and 382.0518.

TCEQ authorization of the non-GHG emissions is also consistent with the TCEQ's authority to control air quality in the state and to regulate stationary sources necessary to assure that the NAAQS are achieved under State Implementation Plan (SIP) requirements in Section 110 of the Federal Clean Air Act. Section 110(a) requires each SIP include enforceable emission limits, including permitting programs for minor and major sources to attain and maintain the NAAQS.

COMMENT 14: Commenters state that they were not notified about the application or received inadequate notice based on the location and size of the notices published in the newspaper and the signs posted at the proposed site. (Comment Group C)

RESPONSE 14: The Executive Director directs applicants to provide public notice as required by commission rules, in accordance with statutory requirements. Specifically 30 TAC Chapter

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 18 of 23

39 requires that public notice of applications be published in a newspaper of general circulation in the municipality which the facility is located or proposed to be located or the municipality nearest to the location of the facility. The notice must be published in the public notice section of the newspaper. A second notice with a total size of at least six column inches, with a vertical dimension of at least three inches and a horizontal dimension of at least two column widths, or a size of at least 12 square inches, must be published in a prominent location elsewhere in the same issue of the newspaper. Section 39.603 proscribes the content required in the public notice. The applicant has represented notice was published in accordance with TCEQ rules and provided corresponding signed affidavits and verification forms to the commission. The TCEQ reviewed the newspaper tearsheets to verify the information was correctly published.

TCEQ rules in 30 TAC § 39.604 stipulate the requirements for sign posting of public notice for air quality permit applications. Specifically, 30 TAC § 36.604(c) states that signs must be located within ten feet of every property line paralleling a public highway, street, or road. Signs must be visible from the street and spaced at not more than 1,500-foot intervals. A minimum of one sign is required, but no more than three signs are required along any property line paralleling a public highway, street, or road. The Applicant has represented that sign posting was conducted in accordance with commission rules.

COMMENT 15: Mr. John Rodriguez requested a delay in the construction of the facility to allow time for more public input.

RESPONSE 15: In accordance with Texas Health and Safety Code § 382.0518, before work has begun on the construction of a new facility or modification of an existing facility that may emit air contaminants, the person planning the construction or modification must obtain a permit or permit amendment from the commission. At the time of this response, the permit for this plant has not been issued. The public participation process for this application began with the comment period following publication of The Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) on May 7, 2012 and continued through publication of The Notice of Application and Preliminary Decision for an Air Quality Permit on October 15, 2012 and the public meeting held on December 13, 2012 in El Paso. Although the public comment period ended on December 13, 2012, public participation in the process continues through the contested case hearing process which began on January 22, 2013. At the conclusion of the hearing process, the Commission will consider the Administrative Law Judge's Proposal for Decision in this matter at a regularly scheduled Commission meeting. At that time, the Commission may decide whether to issue or deny the permit. The commission shall grant the permit if, from the information available to the commission, including information presented at any hearing, the commission finds the proposed facility will use at least the best available control technology, considering the technical practicability and economic reasonableness of reducing or eliminating the emissions resulting from the facility, and no indication that the emissions from the facility will contravene the intent of the Texas Clean Air Act, including protection of the public's health and physical property.

COMMENT 16: Commenters questioned the safety of the proposed plant's location and operation. Commenters are also concerned about the location of the proposed plant close to

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 19 of 23

adjacent existing fuel storage tanks or the Longhorn Pipeline running by the property. Commenters stated there could be potential explosions or other hazards created by the proposed plant in addition to the fuel storage tanks or the Longhorn Pipeline. Mr. Rafael Carrasco commented that emissions from the fuel tanks could be harmful. Additionally, commenters are also concerned about the ability of first responders to respond to emergencies at the proposed plant site. Commenters state that the volunteer fire department is not equipped to handle a disaster at the site. (Comment Group D) Mr. Steven Mello is concerned about accidental discharges of ammonia.

RESPONSE 16: 30 TAC § 101.201(a) requires regulated entities to notify the TCEQ regional office within 24 hours of the discovery of releases into the air and in advance of maintenance activities that could or have resulted in emissions in excess of a reportable quantity of an air contaminant as defined in TCEQ rules (an emission event). This quantity varies based on the air contaminant released. These notifications are available to the public upon request and on the TCEQ's website. In the event a citizen is adversely impacted by air emissions from this or any other facility, they may register a complaint with the El Paso regional office (telephone (915) 535-5100, toll free 1-888-777-3186). The TCEQ investigates all complaints received.

In the event of an emergency, the Local Emergency Planning Committee (LEPC) and the regulated entity have the primary responsibility of notifying any potentially impacted parties of the situation. Occasionally, depending on the chemicals handled, the location of the facility, and the processes involved, a permit application may require a disaster review. Proposed projects which involve toxic chemicals that are known or suspected to have potential for life threatening effects upon off-facility property in the event of a disaster, and involve manufacturing processes which may contribute to the potential for disastrous events, are candidates for disaster review. This application did not require a disaster review. The TCEQ does not have jurisdiction over local fire protection requirements within the plant or off-property. However, the TCEQ is unaware of a natural-gas fired power plant that has caused off-property damage related to fire or explosion. Safety valves designed to close when a pipe rupture is detected are typical design features of gas-fired power plants.

While sites adjacent to the proposed plant may handle chemicals that have explosion or other risks associated with them, the TCEQ cannot, in the air permit application process, require a third party to mitigate the disaster risks of another nearby entity. In addition, the proposed plant would not emit any compound, except ammonia, that is similar to what is emitted from the nearby fuel tanks. Please refer to Response 1 for a discussion on the review of emissions of ammonia. However, many power plants exist among the refineries and chemical plants along the Gulf Coast and the TCEQ is unaware of any instance where a power plant was the direct cause of a disaster such as an explosion or fire. Additionally, refineries along the Gulf Coast typically have fuel tanks much larger than those located close to the proposed plant.

COMMENT 17: Commenters are concerned about the compliance history of El Paso Electric's existing sites and how they will operate the Montana Station power plant if an air permit is granted. (Ms. Lourdes Falcon, Mr. Edmundo Salazar, Mr. Mario Solana and Mr. Vincente Garner)

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 20 of 23

RESPONSE 17: During the technical review, a compliance history review of the company and the site is conducted based on the criteria in Title 30, Chapter 60 of the Texas Administrative Code (TAC). These Rules may be found at: http://www.tceq.state.tx.us/rules/index.html. The compliance history for the company and site is reviewed for the five-year period prior to the date the permit application was received by the Executive Director. The compliance history includes multimedia compliance-related components about the site under review. These components include the following: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance.

This permit application was received after September 1, 2002, and the company and site have been rated and classified pursuant to Title 30, Chapter 60 of the Texas Administrative Code. A company and site may have one of the following classifications and ratings:

High: rating < 0.10 (above-average compliance record) Average by Default: rating =3.01 (these are for sites which have never been investigated) Average: 0.10 < rating < 45 (generally complies with environmental regulations) Poor: 45 < rating (performs below average)

This site has a rating of 3.01 and a classification of Average by Default. The company rating and classification, which is the average of the ratings for all sites the company owns, is 0.0 and High, respectively.

Sites owned by the El Paso Electric Company that are not located within in the State of Texas are not considered in the compliance history determination.

COMMENT 18: Commenters generally state they oppose the permit and that the plant should not be built. Commenters state they do not want the proposed plant in their neighborhood and that the applicant should propose a different location for the plant. Additionally, commenters stated that the proposed plant will decrease property values. Additionally, commenters are concerned about traffic and the overall aesthetics of the area surrounding the proposed plant. (Mr. Jesus Carruth, Mr. Joel Zamora and Ms. Elvia Saldivar) Commenters stated the plant will produce excessive noise and vibration.

Commenters are concerned about the creation of an electromagnetic field (EMF) and radiation regarding the proposed power generation. Commenters are concerned about light pollution from the proposed plant. (Comment Group E)

Mr. Jesus Carruth and Mr. Glenn Nathan asked what the economic impact including local job creation the proposed power plant would generate for the local community. Ms. Gabriela Contreras also asked about the proximity to schools and homes.

RESPONSE 18: The TCEQ's jurisdiction is established by the Legislature and is limited to the issues set forth in statute. Accordingly, the TCEQ does not have jurisdiction to consider traffic, aesthetics, property values, vibrations, light, economic impact, or job creation when determining whether to approve or deny a permit application. Additionally, the TCEQ does not have

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 21 of 23

jurisdiction to consider facility location choices made by an applicant when determining whether to approve or deny a permit application unless state law imposes specific distance limitations that are enforceable by the TCEQ. Except under limited circumstances, which do not exist under this particular permit application, the issuance of a permit cannot be denied on the basis of the facility location. Zoning and land use are beyond the authority of the TCEQ for consideration when reviewing air quality permit applications, and such issues should be directed to local officials. In addition, the TCEQ does not have jurisdiction to consider an EMF or other forms of radiation that are not defined as air contaminants by the TCAA. Aerial satellite photos, reviewed by the permit engineer depict the nearest school as approximately 6,700 feet from the proposed site and the nearest home is adjacent to the eastern and western site boundaries. Please refer to Response 1 above for a discussion on the technical review of the application and corresponding impacts of emissions from the plant.

The TCEQ may not deny a permit if an applicant demonstrates it will use at least the BACT and there is no indication that the emissions from the facilities will contravene the intent of the TCAA, including protection of the public's health and physical property. *See* TCAA § 382.0518.

COMMENT 19: Ms. Zulieth Cryderman stated the applicant should perform a nonattainment review alternative site analysis. Mr. Jim Bearden and Mr. Manuel Padilla stated alternative sites should be analyzed as part of the TCEQ permitting process.

RESPONSE 19: The location of the proposed plant is in El Paso County which is in attainment of the NAAQS for all criteria pollutants. Prevention of Significant Deterioration (PSD) rules are outlined in 30 Texas Administrative Code (TAC) § 116.160 - 116.163 and 40 Code of Federal Regulations (CFR) § 52.21. Non-attainment (NA) reviews are required when a major source is located within a NA area. Texas NA area designations are specified in 40 CFR § 81.344. The facility is a major source, but is not located in a NA area. Therefore, a PSD review was completed for this plant, and a NA review was not required. There is no requirement for an alternative site analysis in the PSD rules located at 30 TAC Chapter 116. Additionally, please see Response 18 for more information on location regarding this permit application.

COMMENT 20: Mr. Bill Guerra-Addington stated that the plant is locating in a disadvantaged area and that this is an environmental justice issue.

RESPONSE 20: As described in Response 18 above, the TCEQ does not have zoning authority. However, as described in Response 1, the TCEQ evaluates the potential impacts of emissions the proposed plant in accordance with the TCAA. A review of the application indicated that emissions from the plant will not contravene the intent of the TCAA or cause or contribute to an exceedance of the NAAQS. Therefore, the review of the application indicated that no adverse impacts or health effects are anticipated.

Executive Director's Response to Public Comment El Paso Electric Company, Permit Nos. 102294 and PSDTX1290 Page 22 of 23

COMMENT 21: Mr. Marty Schafer is concerned about smells from the plant.

RESPONSE 21: With the exception of an odorant in the natural gas used to aid in the detection of leaks, the application proposes the use of ammonia which causes odor. While both compounds have the potential to cause odor when in high concentrations in the ambient air, the very low concentrations at which they will be emitted from this facility are not expected to cause odor. All permit holders must comply with 30 TAC § 101.4, which prohibits nuisance conditions. Specifically, the rule states that "no person shall discharge from any source" air contaminants which are or may "tend to be injurious to or adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property." Emissions from the facility are not expected to produce nuisance odors. However, individuals are encouraged to report any concerns about nuisance issues by contacting the Regional Office at (915) 834-4949, or by calling the twenty-four hour toll-free Environmental Complaints Hotline at 1-888-777-3186. The TCEQ investigates all complaints received. If a facility is found to be out of compliance with the terms and conditions of its permit, it may be subject to possible enforcement action.

COMMENT 22: Ms. Gabriela Contreras asked what utility sources exist in Montana Vista and Horizon City. Additionally, Ms. Contreras asked if the power generated by the plant would go to the Montana Vista area.

RESPONSE 22: The TCEQ does not have jurisdiction to consider where the product of a facility is sold or consumed in determining whether to approve or deny an air permit application. Accordingly, the TCEQ Air Permits Division does not track information regarding local utility sources. The City or County of El Paso may have that information.

CHANGES MADE IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

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REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY