SOAH DOCKET NO. 582-13-1520
TCEQ DOCKET NO. 2012-2608-AIR

APPLICATION BY	§	**BEFORE THE**
	§	
EL PASO ELECTRIC COMPANY	§	
	§	**STATE OFFICE**
FOR AIR QUALITY PERMIT	§	
	§	
102294/PSD-TX-1290	§	**OF ADMINISTRATIVE HEARINGS**

ALIGNED PROTESTANTS' EXCEPTIONS TO THE PROPOSAL FOR DECISION

TO THE HONORABLE CHAIRMAN SHAW AND COMMISSIONER BAKER:

COME NOW, Ralph Carrasco and Far East El Paso Citizens United (Aligned Protestants)[1] and file their Exceptions to the Proposal for Decision (PFD) by Administrative Law Judge (ALJ) Richard Wilfong and their proposed changes to the order's Findings of Fact and Conclusions of Law.

I. INTRODUCTION

Aligned Protestants respectfully disagree with the PFD, which errs in three important ways and consequently does not comply with the Clean Air Act. First, the PFD misapplies the law regarding Best Available Control Technology (BACT) review: El Paso Electric (EPE) should have considered a dry-hybrid plant, which would both reduce emissions and water usage. Instead of consuming 140 million gallons of water per year, EPE could build a plant that does not require that water usage. The plant proposed by EPE is a General Electric LMS100, which can be configured wet, dry or dry-hybrid; the dry-hybrid configuration, which should have been considered as BACT, is in GE brochures, is comparable in price and would reduce particulate emissions and save water.

[1] Contrary to the ALJ's assertion, Mr. Ralph Carrasco was designated as a party at the preliminary hearing *and* participated at the hearing by and through his attorneys at Texas RioGrande Legal Aid, Inc. (TRLA). *See* Entry of Appearance filed on March 6, 2013.

EPE considered a dry configuration of the plant in its BACT analysis; if it could consider dry, it should have also considered dry-hybrid.

Second, the PFD ignores legal requirements that air modeling use the "best science." Rather than employ the most recent air pollution modeling techniques and data, EPE used old data and models that omit low wind conditions. Consequently, EPE's modeling under predicted ground level concentrations of pollutants. If current data and models are used, the undisputed results require EPE to undertake additional analyses of the effects of its plant on air quality.

Finally, the ruling fails to enforce the requirement that the application include preconstruction monitoring data. There is no dispute that these data were not included in the permit application.

The record does not support findings that EPE's proposed Montana Power Station will comply with the Clean Air Act (CAA). Instead, EPE expects TCEQ to ignore important legal requirements. EPE's expert testified that had its modeling been required to use most recent models and data and had the pre-construction monitoring been added as background, EPE might have predicted higher ground level concentrations of pollutants but could simply have "engineered around" the high ground level concentrations. That is precisely the result anticipated by the CAA: if the contaminants emitted are not protective of human health, the plant should be reengineered, the stacks made higher, fuels changed, or other efforts made to protect air quality. This issue is particularly important in El Paso County, which verges on nonattainment for particulate matter. Additionally, EPE expects the Commission to ignore the technology-forcing role of the BACT review, which could have lead to a better plant with lower emissions that

does not waste precious water in a desert region. EPE expects the Commission to allow EPE to disregard the latest technology. Protestants are not proposing a radical technology, just the latest version of a power plant that meets EPE's criteria and complies with the law.

All parties agree that EPE bears the burden of proof in this case: EPE must prove to the Commission that it complies with all legal requirements. EPE has cut corners and not complied with important legal requirements. Aligned Protestants respectfully urge Commissioners to deny the permit, or in the alternative, remand the permit to the Executive Director.

II. CONTESTED ISSUES

A. EPE's application fails to comply with BACT requirements, which would include a review of the dry-hybrid intercooler system.

"[O]nly those control technologies that can be applied to the proposed major source [must] be considered in the BACT analysis."[2] The General Electric (GE) LMS100 uses an intercooler which is available in three configurations: "Wet", which relies on cooling towers, "Dry", which does not rely on cooling towers, and "Dry-Hybrid", which uses an evaporative cooling system and provides equivalent performance to the "Wet" configuration.[3] A Dry-Hybrid intercooler can easily be part of the Montana Plant and will reduce emissions.

At TCEQ's request, EPE used the EPA's Top-Down method of determining BACT, a process intended to have EPE first consider all available technologies and then

[2] *Blue Skies Alliance v. TCEQ*, 283 S.W.3d 525, 535 (Tex. Civ. App. – Amarillo 2009).
[3] EPE Ex. 4U at 8.

choose the "best" from among that cohort.[4] The Top-Down approach requires putting together a list of "all 'available' control options."[5] "[A]vailable ... is used in its broadest sense under the first step and refers to control options with a 'practical potential for application to the emissions unit' under evaluation. The goal of this step is to develop a comprehensive list of control options."[6]

In compiling its list of all available control options, EPE engineer Mr. Andres Ramirez talked with GE. But he only discussed the Dry configuration and did not include Dry-Hybrid.[7] No engineer for EPE or TCEQ evaluated a Dry-Hybrid configuration for the plant. There is no dispute that the Dry-Hybrid configuration of the plant is a configuration that is sold by GE, just as the Dry option is sold.

EPE contends that a Dry-Hybrid configuration is a "redesign" of the plant, and therefore, EPE did not have to consider a Dry-Hybrid configuration. This argument is inconsistent with the BACT review in this application. EPE's BACT review included a review of a Dry system. How can a Dry system be part of an appropriate BACT review, but a Dry-Hybrid system somehow be a "redesign" of the system? Such an argument defies logic.

Even the "redefine the source" argument does not hold up. EPE expert Paul Greywall admitted that if there were no power loss associated with a Dry-Hybrid intercooler, then selection of that configuration would not redefine the source of the Montana Power Station.[8] He also could not refute GE's claim that the LMS100 equipped with a Dry-Hybrid intercooler system provides equivalent performance to EPE's

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[4] *In Re Knauf Fiberglass,* GMBH, 8 EAD 121, 129-130 (EAB 1999).
[5] *Id.*
[6] *Id.*
[7] Tr. at 25-30, 36, 38. (Ramirez on cross).
[8] Tr. 195.

proposed LMS100 configuration.[9] Therefore the record does not support the conclusion that selecting the Dry-Hybrid LMS100 as BACT would redefine the source of the Montana Power Station.

EPE's complaint about the Dry-Hybrid LMS100 is based on erroneous assumptions about its efficiency. EPE and its experts conflate Dry-Hybrid with the standard Dry configuration, leading EPE to erroneously claim Dry-Hybrid cooling results in a 10% reduction in performance.[10] EPE uses GE's efficiency figures for the *Dry* configuration, which led to their argument of a 10% reduction in performance.[11] Aligned Protestants do not suggest that EPE use the Dry configuration of the plant, but instead the *Dry-Hybrid* version, which GE's figures show to be equally efficient to the Wet configuration chosen by EPE.[12] EPE's justification for choosing the Wet configuration with cooling towers configuration rests wholly on this factual error.

Dry-Hybrid cooling does not appreciably increase the capital cost of the LMS100.[13] The levelized capital cost for the Wet configuration of LMS100 is $307,388,000 while that of the Dry-Hybrid LMS100 is $308,799,000, a difference of $1,411,000, not the $11 million estimated by EPE expert Mr. Andres Ramirez.[14] A review of the levelized annual costs of the three LMS100 configurations reveals that the Dry-Hybrid configuration is actually only slight more costly than the Wet configuration, $110,159.09 versus $109,586.56.[15]

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[9] Tr. 200-201.
[10] EPE Ex. 4U at 7-8, Tr. at 25-30 (Ramirez on cross); Tr. at 195-198 (Greywall on cross).
[11] *Id.*
[12] EPE Ex. 4U at 7-8
[13] AP Ex. 27 at 27 (Powers prefile).
[14] Tr. at 77 (Ramirez on cross).
[15] Tr. at 89-92 (Ramirez on cross).

Operating costs would actually be less because unlike the cooling towers, Dry-Hybrid cooling does not incur the same water and wastewater costs.[16] The annual water and wastewater costs savings of $370,000 more than offset the annual $135,000 increased energy cost to meet fan power demand for Dry-Hybrid cooling.[17]

Therefore, the Application is deficient on its face and FOFs Nos. 32, 101, 102, 103, 104, 107, 108, 110, 111, 112, 117, 118, 119, 123, 124 and COLs Nos. 7, 36, 38, 51, 52, 54 are in error.

B. EPE's use of outdated weather data and computer models produced significantly underestimated the air emission impacts. EPE should be required to use updated data and models and to conduct a full impact analysis.

In predicting the effects of the Montana Plant, it is undisputed[18] that EPE was required to "utilize the most advanced practical technology that is available at a reasonable cost to users."[19] "In all cases, the model applied to a given situation should be the one that provides the most *accurate representation* of atmospheric transport, dispersion, and chemical transformations in the area of interest."[20] This is referred to as "state-of-the-science." The modeling standards are not recommendations, but instead establish a scientific and legal standard. While certainly there is some flexibility in the standards, EPE is required to use modeling that predicts the "most accurate representation." There is no testimony disputing the fact that EPE chose a model and

[16] AP Ex. 27 at 28 (Powers prefile).
[17] *Id.* at 28-29 (Powers prefile).
[18] EPE Closing Argument at 18.
[19] AP Ex. 11 at 68225, Sec. VI. TCEQ requires, "All estimates of ambient concentrations ... *shall* be based on the applicable air quality models and modeling procedures specified in the EPA Guideline on Air Quality Models." 30 TAC 116.160(d).
[20] AP Ex. 11 at 68230, Sec. 1. e. (emphasis added).

inputs that lower the predicted ground level concentrations. EPE did not present "the most accurate presentation" of the effect of its plant.

Instead of using the most recent model with the most robust weather data, EPE used 20-year-old weather data and an outdated model. While 20-year-old weather data is not automatically inaccurate, the weather data omitted low-wind weather conditions, which were not required for an older version of the air model. The current air modeling protocol includes high and low wind conditions. The importance of this fact cannot be lost on the Commissioners. Pollution disperses more in high winds. When low wind conditions are omitted from a model, the model will over-predict the dispersion of pollutants. EPE's predictions are not the most accurate and should not be relied upon.

Aligned Protestants hired an air modeler who used the latest air model and weather data. His modeling, which was not criticized at the hearing for accuracy, predicted higher concentrations of pollutants. The concentrations were high enough to require EPE to have to undertake a full impact analysis, which was not conducted in this case.

EPE used weather data last collected in 1991. Since 1991, the last year of the data set that EPE used, there have been significant improvements in the methods used to collect weather observations and to process this weather data into a suitable format for use for dispersion modeling, making the modeling more reliable. Prior to 1991, meteorological observations were human observer-based. Beginning in 1991, weather stations began to convert an Automated Surface Observing System (ASOS) to record hourly observations.[21]

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[21] Tr. 468.

In order to determine whether data are representative, a number of factors must be reviewed: "(1) The proximity of the meteorological monitoring site to the area under consideration; (2) the complexity of the terrain; (3) the exposure of the meteorological monitoring site; and (4) the period of time during which data are collected."[22] In its analysis of the weather data used, TCEQ mentions the year and location of the meteorological data, but there is no further discussion about the adequacy or representation of the data.[23] When asked whether the data from 1987 to 1991 were representative, the TCEQ's modeler could only answer, "Well, the data that was used in the analysis is representative -- I mean, it was collected in El Paso, so it would be representative data."[24] Just because data are from a geographic region does not confer representative status on those data.

EPA modeling programs used to process these observations for dispersion modeling have been updated to reflect the new procedures. Weather data are now based on both human observers and an automatic surface observing system called ASOS.[25] ASOS provides more weather data than the former human observer method.[26] Human-observed weather data were collected once per hour. ASOS data are collected once per second.[27] The improvement in the collection of weather data has improved both the accuracy and amount of weather available for dispersion modeling analyses.[28]

Additionally, older weather data omits measurements, including low speed wind measurements, which are the most critical for dispersion modeling because that is when

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[22] *Id.*
[23] AP Ex. 1 at 11; AP Ex. 4.
[24] Tr. at 496.
[25] Tr. 123.
[26] Tr. 124.
[27] Tr. 125.
[28] *Id.*

higher emission concentrations are expected.[29] Older weather data also do not comply with Appendix W's recommendation for "handling missing hours."[30] Further, more recent weather collection methods provide for more frequently gathered data and thus, more data.[31]

EPE chose to use the most recent version of EPA's modeling software, AERMOD 12060, which had been released on February 29, 2012.[32] EPE chose to use AERMET 06341 from 2006.[33] Rather than use the most current weather modeling inputs to that modeling protocol -- AERMET 11059 (released February 28, 2011) and AERMINUTE 11325 (released February 21, 2011) -- EPE chose to use a 2006 version of AERMET and did not use AERMINUTE, instead using 22-year-old weather data.[34] AERMET 11059 and AERMINUTE 11325 were available to EPE's air modelers with Trinity Consultants, who, in June 2011, were advertising the new versions of AERMET and AERMINUTE[35] and who were using the new models for other clients.[36] By the summer of 2011, private AERMOD software providers, including EPE's modeling consultant Trinity Consultants, began incorporating AERMINUTE into their updates.[37] EPE had sufficient time to use the new modeling protocol. It wasn't until July 3, 2012 – 17 months after the new software became available —that EPE submitted its modeling protocol to TCEQ on July 3, 2012.[38]

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[29] Tr. at 264 -265 (Klafka on cross); AP Ex. 1 at 14-15 (Klafka prefile).
[30] AP Ex. 11 at 68245, Sec. 8.3.4.1.
[31] Tr. at 124-126 (Greywall on cross).
[32] EPE Ex. 112 at 15.
[33] *Id.*
[34] EPA's bulletin (December 2006) announcing AERMET version 06341 is available at: http://www.epa.gov/ttn/scram/7thconf/aermod/aermet_mcb1.txt
[35] AP Ex. 14 at 1.
[36] Tr. at 115 (Greywall on Cross).
[37] *Id.*
[38] EPE Ex. 112.

EPE's modeling predicted ground level concentrations of PM2.5 just under the significant impact level (SIL), thereby avoiding further analysis required to verify compliance with the National Ambient Air Quality Standards (NAAQS). EPE's chosen modeling procedures simply did not provide the most modern and accurate prediction of air quality impacts of the plant. EPE's choice to not use the best available modeling tools resulted in the under-prediction of ambient air pollutant concentrations.

On its meteorological website, Trinity encourages permit applicants to use current data, stating: "While many sites may offer 'free' data to use in the AERMET meteorological processor, this data is often very old and not preferred by most regulators. Why worry about the liability of handling unfamiliar, out of date data?"[39] EPE's expert, Mr. Greywall even testified that Trinity and BREEZE sell meteorology data to be used with dispersion modeling software such as AERMOD. Mr. Greywall also testified that Trinity could have processed more recent weather data for this application:

> Q: Excuse me, couldn't you have run the weather data for El Paso?
>
> A: We could have processed more recent meteorological data, yes.[40]

The choice to provide data through BREEZE or through the TCEQ is not prompted by a regulatory requirement. As Mr. Greywall testified, the applicant decides what data set to use:

> Q: If someone asks for meteorological data to use with AERMOD, would Trinity provide recent data or 20-year-old data –
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> A: They would provide whatever data the individual who's requesting the data asked for.

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[39] AP Ex. 1 at 16 (Klafka prefile).
[40] Tr. at 129-130 (Greywall on cross).

Q: So this decision is based on the clients? It's prompted by the client's request and not a regulatory requirement?

A: If -- if we were to provide data through BREEZE to a client, we would provide them whatever data they requested.[41]

In this case, EPE chose to use the TCEQ's preprocessed outdated meteorological data.[42]

By using outdated modeling protocol, EPE's modeling analysis excluded all hours that had winds that were under 1.5 meters per second (m/s). AERMINUTE 11325 (February 21, 2011) included all winds, including those under 1.5 m/s.[43] Aligned Protestants' expert Klafka, ran the modeling using AERMINUTE 11325 and recent weather data.

The ED's modeling expert, Mr. Justin Cherry was unable to estimate the number of hours in a year that were ignored by the EPE modeling analysis. Nor was he able to explain whether there are predominantly low wind conditions in El Paso. By failing to use the best science, EPE did not follow the EPA Guideline.

The EPE modeling analysis showed that the 24-hour average concentration for PM2.5 was 1.19, only .01 ug/m3 or 0.8% below the SIL of 1.2 ug/m3.[44] As Greywall stated, "[I]t's very close to the SIL."[45] The 1-hour average NO2 modeling result of 7.49 ug/m3 was also slightly less than the SIL of 7.5 ug/m3. This is 0.01 ug/m3 or 0.1% below the SIL.[46] The project was designed to be right below the SIL and thus avoid the need for a Full Impact Analysis necessary to verify compliance with the NAAQS.

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[41] Tr. at 122 (Greywall on cross).
[42] *Id.*
[43] The AERMINUTE version from March 2013 modified AERMINUTE 11325 to include winds between 1.5 m/s and 0.5 m/s.
[44] EPE Ex. 105 at 42 (Table 8-1).
[45] Tr. 140.
[46] AP Ex. 1 at 12.

When the newer TCEQ 2006-2010 meteorological data are used, the modeling results for both PM2.5 and NO2 predict impacts are clearly greater in EPE's modeling analysis and in fact, higher than the respective SIL for each pollutant.[47] For PM2.5, the results showed 2.08 ug/m3 for the 24-hour PM2.5 NAAQS, or 0.88 ug/m3 above the SIL.[48] This means that by using more recent meteorological data, the predicted project impact increased 75%. For NO2, the updated modeling result using current meteorological data was 9.57 µg/m3. This means that by using more recent meteorological data, the predicted project NO2 impact increased 28%.[49] As Mr. Greywall stated, he was surprised that the concentrations were "that much higher."[50]

As both TCEQ and EPE recognize, had Mr. Klafka's results been submitted with the application, a Full Impact Analysis would have been required.[51] A Full Impact Analysis would have required EPE to model all on-site sources; evaluate off-property sources and include a background concentration.[52] Sources from Mexico would have been included in the Full Impact Analysis, as well as sources from New Mexico.[53] As Mr. Greywall stated, a Full Impact Analysis would include:

1) modeling the same sources that we modeled, which is our own facility,
2) modeling inventoried sources, which are sources nearby our proposed site that would likely impact air quality near, and
3) add a representative background concentration from a nearby monitor.[54]

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[47] AP Ex. 1 at 17-18; AP Ex. 10; Tr. 474-476.
[48] AP Ex. 10.
[49] AP Ex. 1 at 17-18.
[50] Tr. 134.
[51] Tr. 136; Tr. 476.
[52] Tr. 479.
[53] Tr. 480.
[54] Tr. 137, See also AP Ex. 16 at 14-20.

If a comparison with the new 2013 version of AERMINUTE were required, only the hours that had winds speeds under 0.5 m/s should have been excluded from Mr. Klafka's analysis. The unanswered question that remains is how the concentration estimates change from excluding wind speeds under 0.5 m/s, versus including them. EPE has not disproven the difference in the outcome and it admits it cannot estimate the hours that were dropped.[55] Mr. Klafka has looked at the difference in the outcome in other projects. In one project, he did not find a difference and he testified that the Wisconsin Department of Natural Resources found the over-prediction to be at most 10 percent.[56] The table below demonstrates that even when considering a 10 percent over-prediction, the emission concentrations of PM2.5 and NO2 still exceed the SIL, thus requiring EPE to conduct a full impact analysis. Without this analysis, EPE cannot prove that its project will comply with the NAAQS for these air pollutants.

PSD De Minimis Analysis in Micrograms Per Cubic Meter (µg/m3)[57]

Pollutant	Averaging Time	GLCmax (ug/m3) Not including hours with winds below 1.5 m/s[58]	GLCmax (ug/m3) Including hours with winds below 1.5 m/s[59]	GLCmax (ug/m3) Including hours with winds below 1.5 m/s minus 10%	**De Minimis Standard (ug/m3)**
PM2.5	24 hrs	1.49	2.08	1.872	**1.2**
NO2	1 hr	7.49	9.57	8.613	**7.5**

[55] Tr. at 116-117 (Greywall on cross).
[56] Tr. at 233-234 (Klafka on cross).
[57] The first two columns of this table include information already in the record. *See* EPE Ex. 105 at 42 (Table 8-1) and AP Ex. 10. The third column is merely the reduction by 10% of the concentration projections presented in AP Ex. 10.
[58] EPE Ex. 105 at 42.
[59] AP Ex. 10.

As stated by the ED's expert, Mr. Cherry, the mission of the TCEQ is to protect human health and welfare.[60] TCEQ cannot assure Aligned Protestants that the EPE Montana Power Station complies with the NAAQS and is failing to abide by its duty to protect human health and welfare.

Therefore, FOF Nos. 32, 40, 43, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 63, 65, 70, 86, 133, 135, 139, 140 and COL Nos. 7, 8, 12, 17, 19, 22, 39, 46, 47, 48, 52-54 are in error.

C. EPE's Application failed to include pre-construction continuous monitoring.

"[A]ny application for a permit … shall contain an analysis of ambient air quality in the area," and "the analysis shall contain continuous air quality monitoring data gathered for the purpose of determining whether emissions of that pollutant would cause or contribute to a violation" of the national ambient air quality standards (NAAQS).[61] Additionally, the monitoring data "shall have been gathered over a period of at least one

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[60] Tr. at 477 (Cherry on cross).

[61] TCEQ has adopted by reference 40 CFR § 52.21(m)(emphasis added) which provides:

(m) Air quality analysis – (1) Preapplication analysis.

(i) **Any application for a permit under this section shall contain an analysis of ambient air quality in the area** that the major stationary source or major modification would affect for each of the following pollutants:

(a) For the source, each pollutant that it would have the potential to omit in a significant amount;

(b) For the modification, each pollutant for which it would result in a significant net emissions increase.

(ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Administrator determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, **the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.**

(iv) In general, the **continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application**, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

year and shall represent at least the year preceding receipt of the application."[62] These rules are consistent with the statutory Clean Air Act (CAA) requirement.[63]

With such a clear rule, why is it undisputed that these data were not included in the permit application? The answer is that when EPE filed its permit application, EPE was exempted from submitting the preconstruction monitoring data. That exemption was invalidated on January 22, 2013.[64] Instead of amending its application to comply with the law requiring preconstruction monitoring in its permit application, EPE continued ahead, without a complete permit application. The record is clear that EPE's "application" was declared technically complete on October 9, 2012, and that TCEQ issued a draft permit based on that completed application.[65] On October 15, 2012, a notice of the completed application was published as required by law, and the completed application was made available for public comment.[66] It is undisputed that the application that was reviewed by TCEQ and made available to the public did not include one year's worth of pre-construction monitoring data. As EPE's permit engineer, Mr. Paul Greywall testified at the hearing, "That's correct. There is no monitoring data in the modeling report or the permit application."[67]

A public meeting was held on the completed application in December 2012, and the public comment period was closed on December 12, 2012. The public commented on an application that did not include pre-construction monitoring. It is undisputed that the EPE's modeling report did not include preconstruction monitoring data.

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[62] 40 CFR § 52.21(m)(iv).
[63] 42 U.S.C. § 7475(e)(2).
[64] *Sierra Club v. EPA,* 705 F.3d 458 (D.C. Cir. 2013).
[65] FOF 14.
[66] FOF 15 & 16.
[67] Tr. at 133 (Greywall on cross).

Eventually, on April 8, 2013, after the application was complete, TCEQ's review was finished, and the public comment was closed, EPE's expert compiled multiple spreadsheets of raw monitoring data that it disclosed to Protestants in discovery in this contested case.[68]

In order to include pre-construction monitoring, more is required that mere production of spreadsheets. In order to include monitoring data in the application, EPE should have selected a representative monitor and proved to TCEQ that: (1) the monitor proposed for data usage was "representative" of the air in the area (there is more than one monitor in El Paso County); (2) the monitor had "continuous" data, i.e., 24 hours a day, 7 days a week; (3) the monitor met EPA requirements (not all monitors in El Paso County are approved by EPA); and (4) the data met the TCEQ's completion criteria.[69] EPE did not take these steps. TCEQ's 2011 guidance on monitoring discusses the applicant's duty to propose a "monitoring plan" or to find "representative" or "conservative" monitoring data when pre-construction monitoring data is required. A mere submission of monitoring numbers, such as were produced by EPE in discovery after its application was complete, does not suffice.[70]

To comply with the pre-construction monitoring requirement, the next step for EPE would have been an "analysis" of the effect of its emission of PM2.5 on ambient air quality, that is, the existing background air quality as found in a representative

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[68] EPE Ex. 100 at 127-129, and 123.
[69] TCEQ's 2011 guidance on monitoring discusses the applicant's duty to propose a "monitoring plan" or to find "representative" or "conservative" monitoring data when pre-construction monitoring data is required. A mere submission of monitoring numbers does not suffice. *TCEQ's PM2.5 Implementation Guidance for Increments, SILs and SMC*, at 2 (October 14, 2011), available at: http://www.tceq.texas.gov/assets/public/permitting/air/memos/pm25-impl-10-14-2011.pdf
[70] *TCEQ's PM2.5 Implementation Guidance for Increments, SILs and SMC*, at 2 (October 14, 2011), available at: http://www.tceq.texas.gov/assets/public/permitting/air/memos/pm25-impl-10-14-2011.pdf

monitoring data.[71] EPE should have appropriately modeled its direct PM2.5 emissions and predicted its secondary PM2.5 emissions (which are formed chemically because of emissions of NOx). With those predictions of direct and secondary PM2.5, EPE would have determined how the total PM2.5 emissions affect El Paso's ability to comply with the NAAQS. In EPE's permit application, to the contrary, because the modeled emissions were below a significant impact level (SIL), no additional analysis was done.[72] The permit application, then, contains no analysis predicting how PM2.5 emissions from EPE affect the NAAQS, using relevant background levels. There is no finding in the PFD that this requirement was met, because the requirement has not been met.

Had EPE complied with pre-construction monitoring requirements, both monitoring data and analysis would have been in the permit application. In its review of the permit application, TCEQ would have determined whether the monitoring data met the relevant criteria. TCEQ would have first "verif[ied] if the data "met the completion criteria."[73] TCEQ also would have determined if the data met the legal requirements of being a year's worth of data from EPA approved monitors that operate continuously and that are "representative." TCEQ completed an air quality audit of EPE's application in October 2012.[74] TCEQ did not analyze any construction monitoring data as part of its permit review.[75] Even at the time of the hearing on this application, TCEQ's air quality modeler Mr. Cherry had not reviewed any monitoring data presented by EPE.[76]

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[71] 30 Tex. Admin. Code § 116.160(2)(B), incorporating 40 CFR 52.21(m). The rule requires "**an analysis** of ambient air quality in the area," and "**the analysis shall contain continuous air quality monitoring data** gathered for the purpose of determining whether emissions of that pollutant would cause or contribute to a violation" of the NAAQS."
[72] EPE Ex. 112 at 30.
[73] Tr. at 456-457 (Cherry on cross).
[74] ED Ex. 17.
[75] *See* TCEQ Technical Briefing Sheet, attached to Motion for Directed Verdict as Exhibit A.
[76] Tr. at 455 (Cherry on cross):

Next, TCEQ would have audited EPE's assertions that its emissions would not compromise the region's ability to comply with the NAAQS, by reviewing the effect of EPE's predicted primary PM2.5 emissions and the secondary formation of PM2.5 (caused by EPE's emission of NOx), and reviewing EPE's analysis of the effect of those emissions on ambient air. TCEQ could not review any analysis because none was completed – to this date, no such analysis has been presented.[77]

Interestingly, the ruling in this case is not that EPE included pre-construction monitoring in its application, as required by law, but instead that "EPE and the ED satisfied any requirement to address pre-construction background concentrations in the record of this proceeding."[78] This conclusion does not comply with legal requirements. Therefore, FOF Nos. 32, 38, 47, 50, 51, 52, 53, 135 and COL Nos. 4, 5, 7, 8, 12, 22, and 52-54 are in error.

D. EPE failed to abide by its obligations under Title VI of the Civil Rights Act.

The PFD concludes that TCEQ is not required to comply with Environmental Justice requirements. This conclusion is in error. As a recipient of federal financial assistance from the EPA, TCEQ must comply with Title VI of the Civil Rights Act (Title

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Q: Have you reviewed the data that was provided in Exhibit 303 yesterday?
A: I have not.

Tr. at 494 (Cherry on cross):

Q: Okay. You don't look at that site very often?
A: I generally start looking at the EPA website when I'm looking at monitoring data.
Q: Did you do that for this case?
A: I was not required to.

[77] EPE Ex. 123. In its prefile, EPE has merely provided Mr. Greywalls' summation of data and not his analysis.
[78] PFD at p. 32

VI) and EPA regulation.[79] The Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs ("Recipient Guidance") applies to this permitting application.[80] That guidance requires, "meaningful outreach and public participation early and throughout the decision-making process… to identify and resolve issues, and to also assure proper consideration of public concerns.[81] TCEQ's expert, Mr. O'Brien succinctly summarized the objective of environmental justice: "It's to protect low-income minority communities from just being overrun with… industrial plants."[82] EPE admits it did not hold meetings to gather people's input about the permit, did not consider Aligned Protestants' community's concerns, much less incorporate those concerns into the permit application.[83] Aligned Protestants have been denied their right to meaningfully participate "early and throughout the decision-making process." Therefore, FOF Nos. 32 and COL Nos. 7.

V. Conclusion

EPE's permit application is fatally flawed and must be denied. EPE and TCEQ failed to review cutting edge control technology being used in the United States. This Dry-Hybrid configuration would reduce particulate emissions, save water and be comparably the same price. Failure to analyze the Dry-Hybrid means the application does not comply with BACT legal requirements. Additionally, EPE under-represented the effect of its emissions on El Paso by using outdated weather and computer modeling

[79] TCEQ agrees that both Title VI of the Civil Rights Act of 1964 and the Environmental Justice Executive Order No. 12898 apply to its programs, including its Environmental Equity program. *See:* http://www.tceq.texas.gov/agency/hearings/envequ.html. *See also* 40 CFR 7.25, definition of recipient.
[80] Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs ("Recipient Guidance"), 71 Fed. Reg. 14207 (March 21, 2006) available at: http://www.epa.gov/civilrights/TitleVIcases/title6_public_involvement_guidance.3.13.13.pdf.
[81] *Id.* at 14209.
[82] Tr. at 433 (O'Brien on cross).
[83] Tr. at 68 (Ramirez on cross); Tr. at 151 (Greywall on cross).

techniques. Using updated and more compete data demonstrate that EPE must conduct additional analysis of the effects of the Montana Power Station on El Paso in order to comply with the Clean Air Act. Next, EPE failed to include and analyze preconstruction monitoring data in its permit application. This omission means the application makes the application incomplete. Finally, EPE neglected to perform an environmental justice analysis. There is no dispute that the community immediately affected by EPE's emissions is a low income, minority community, which an EJ analysis is designed to consider. EPE must be required to comply with the CAA.

Respectfully submitted,

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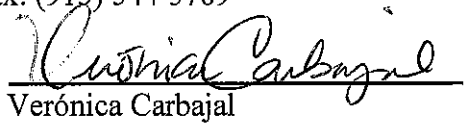
By: 
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FAR EAST EL PASO CITIZENS UNITED

CERTIFICATE OF SERVICE

I certify that a true copy of the foregoing Aligned Protestants' Exceptions to the Proposal for Decision has been served on the following:

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Verónica Carbajal

SOAH DOCKET NO. 582-13-1520
TCEQ DOCKET NO. 2012-2608-AIR

APPLICATION BY	§	**BEFORE THE**
	§	
EL PASO ELECTRIC COMPANY	§	
	§	**STATE OFFICE**
FOR AIR QUALITY PERMIT	§	
	§	
102294/PSD-TX-1290	§	**OF ADMINISTRATIVE HEARINGS**

ALIGNED PROTESTANTS' OBJECTIONS TO THE ALJ'S FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. FINDINGS OF FACT

32. EPE's Application fully addresses all of TCEQ's requirements for an air permit Application.

Objection: The application fails to properly model the emissions, analyze BACT and include preconstruction monitoring.

Revised FOF 32: EPE's Application does not address all of TCEQ's requirements for an air permit Application.

38. EPE performed atmospheric dispersion modeling to demonstrate that emissions from the Montana Power Station will be protective of public health and welfare.

Objection: FOF 38 implies that EPE's modeling were sufficient to demonstrate that emissions from the Montana Power Station will be protective. The modeling was deficient, and the application lacked pre-construction monitoring data.

Revised FOF 38: EPE performed atmospheric dispersion modeling that was not sufficient to demonstrate that emissions from the Montana Power Station will be protective of public health and welfare.

40. EPE's modeling assumed that the worst-case meteorological conditions for dispersion would occur simultaneously with the worst-case emissions scenarios.

Objection: EPE's modeling did not assume worst-case meteorological conditions because the model and weather data omitted low wind conditions.

Revised FOF 40: EPE's modeling failed to assume that the worst-case meteorological conditions for dispersion would occur simultaneously with the worst-case emissions scenarios.

43. The modeling submitted by EPE yielded conservatively high predictions of ambient impacts.

Objection: EPE's modeling did not assume worst-case meteorological conditions because the model and weather data omitted low wind conditions; therefore the results are not conservatively high.

Revised FOF 43: The modeling submitted by EPE failed to yield conservatively high predictions of ambient impacts.

45. EPE and TCEQ conducted an analysis of secondary PM2.5 impacts to determine whether secondary formation of $PM_{2.5}$ would influence direct $PM_{2.5}$ impacts.

Objection: Any analysis of secondary PM2.5 was deficient.

Revised FOF 45: EPE and TCEQ conducted an incomplete and insufficient analysis of secondary PM2 5 impacts to determine whether secondary formation of PM_{25} would influence direct $PM_{2.5}$ impacts.

46. Secondary formation of $PM_{2.5}$ from the Montana Power Station's $S0_2$ and NOx emissions will not influence predicted PM2.s impacts.

Objection: This is factually inaccurate.

Revised FOF 46: Secondary formation of $PM_{2.5}$ from the Montana Power Station's $S0_2$ and NOx emissions will influence predicted PM2.s impacts.

47. For all contaminants subject to review and for which National Ambient Air Quality Standards (NAAQS) and PSD Increments have been established, EPE used the pre-processed meteorological data for the El Paso area that was available on TCEQ's website. For all non-PSD modeling, EPE used a single year of meteorological data to conduct its modeling. This selection was appropriate and fully satisfied the EPA Guideline on Air Quality Models.

Objection: EPE's selection of meteorological data was not the best available science, and the models selected did not conservatively predict results.

Revised FOF 47: For all contaminants subject to review and for which National Ambient Air Quality Standards (NAAQS) and PSD Increments have been established, EPE used the pre- processed meteorological data for the El Paso area that was available on TCEQ's website but was outdated and not the most scientifically accurate data. For all non-PSD modeling, EPE used a single year of meteorological data to conduct its modeling. This selection was not appropriate and failed to fully satisfy the EPA Guideline on Air Quality Models.

48. Emissions from the Montana Power Station will not cause a violation of any NAAQS, an

exceedance of any increment, an exceedance of ESLs, or have any adverse impacts on soils, vegetation, or Class I areas.

Objection: EPE circumvented a full impact analysis and without one, EPE cannot demonstrate it will meet the standards.

Revised FOF 47: There is insufficient evidence to demonstrate that emissions from the Montana Power Station will not cause a violation of any NAAQS, an exceedance of any increment, an exceedance of ESLs, or have any adverse impacts on soils, vegetation, or Class I areas.

50. The maximum predicted concentrations of N02, PM10, PM2.5, CO, and S02 resulting from the Montana Power Station's emissions are less than PSD monitoring *de minimis* concentrations.

Objection: The maximum concentrations exceed *de minimis* levels when appropriate weather data are used with up-to-date models.

Revised FOF 50: The maximum predicted concentrations of PM2.5 and NO2 resulting from the Montana Power Station's emissions exceed the PSD *de minimis level* when appropriately modeled.

51. Both the ED and EPE submitted to the record continuous and representative ambient PM2.s monitoring data from El Paso monitors, providing at least a full year's worth of background PM2.5 concentration data. The ED analyzed data from a monitor used by EPA to establish the attainment status of the area, and EPE analyzed data from monitors with hourly readings posted on TCEQ's web site. Each monitor was appropriate for the purpose of establishing a background concentration in support of a PSD permit application.

Objection: One year's worth of preconstruction monitoring data was required to be in the permit application. This data had to undergo agency review and public comment, neither of which happened.

Revised FOF 51: Both the ED and EPE submitted to the record continuous and representative ambient PM2.5 monitoring data from El Paso monitors, but those data were never made part of the permit application, were not audited, and were not publicly available for comment. There is not sufficient evidence to support a finding that each monitor was appropriate for the purpose of establishing a background concentration in support of a PSD permit application.

52. The ED concluded that the Montana Power Station's impacts, when added to background concentrations, would not exceed any applicable standards. The difference between the PM2.5 NAAQS and the PM2.5 background concentration is greater than EPA's PM2.5 significant impact level, such that no further modeling analysis would be necessary, even

under draft, non binding EPA policies.

Objection: The modeling and weather data do not support these conclusions.

Revised FOF 52: The ED concluded that the Montana Power Station's impacts, when added to background concentrations, would not exceed any applicable standards. These findings are not based on the most robust and scientific information because the modeling data under predicted EPE's emissions.

53. Both the ED's and EPE's analysis of ambient PM2.s monitoring data was presented to all parties in this case more than 31 days before the hearing on the merits and was available to the public prior to the hearing in this matter.

Objection: The ED did not analyze the monitoring data. Mr. Cherry had not reviewed the data for the ED. Further, EPE did not analyze the data, but merely produced raw data in the hearing record.

Revised FOF 53: Neither the ED nor EPE analyzed ambient PM2.s monitoring data, which was presented to all parties in this case but was not in the permit application noticed to the public.

54. TCEQ's Air Dispersion Modeling Team performed an audit of the Modeling Report submitted by EPE and determined that the modeling performed was acceptable for all types of regulatory review and for all pollutants.

Objection: TCEQ's audit of the modeling was inadequate.

Revised FOF 54: TCEQ's Air Dispersion Modeling Team performed an audit of the Modeling Report submitted by EPE, which was not adequate to determine whether the modeling performed was acceptable for all types of regulatory review and for all pollutants.

55. EPE has adequately demonstrated in its Modeling Report that the NAAQS and PSD Increments will not be exceeded. EPE has adequately demonstrated that all applicable state air quality standards will be met.

Objection: EPE's results have a number of flaws: the model selected, weather data input, failure to include preconstruction monitoring data.

Revised FOF 55: EPE has not adequately demonstrated in its Modeling Report that the NAAQS and PSD Increments will not be exceeded. EPE has not adequately demonstrated that all applicable state air quality standards will be met.

63. EPE's modeling showed maximum concentrations at or beyond the property line will not exceed the NAAQS *de minimis* levels for N02, S02, PM10, PM25, or CO.

Objection: EPE's results have a number of flaws: the model selected, weather data input, failure to include preconstruction monitoring data. Aligned Protestants' air modeling demonstrated that the *de minimis* levels for NO2 and PM2.5 are exceeded.

Revised FOF 63: Accurate and legally compliant modeling shows maximum concentrations that exceed the NAAQS *de minimis* levels for N02 and PM_2.

65. Emissions from the Montana Power Station will not cause or contribute to any exceedance of any NAAQS.

Objection: Accurate and legally compliant modeling does not support this conclusion.

Revised FOF 65: There is insufficient evidence to determine whether emissions from the Montana Power Station will not cause or contribute to any exceedance of any NAAQS.

70. Maximum predicted concentrations at all significant receptors within the radius of impact, including impacts from inventory sources, will be below the PSD increment for PM2.5 (24-hour).

Objection: EPE's results have a number of flaws: the model selected, weather data input, failure to include preconstruction monitoring data. There is insufficient legally compliant evidence to support this finding.

Revised FOF 70: There is insufficient accurate and legally compliant modeling data to support a conclusion that maximum predicted concentrations at all significant receptors within the radius of impact, including impacts from inventory sources, will be below the PSD increment for PM2.5 (24-hour).

86. Emissions from the Montana Power Station will not cause any adverse health or welfare effects.

Objection: EPE's results have a number of flaws: the model selected, weather data input, failure to include preconstruction monitoring data. There is insufficient legally compliant evidence to support this finding.

Revised FOF 86: There is insufficient accurate and legally compliant modeling data to support a conclusion that Emissions from the Montana Power Station will not cause any adverse health or welfare effects.

101. In undertaking its BACT analysis, EPE considered information from the TCEQ's BACT guidelines for simple cycle turbines, the RBLC database, vendors and engineering experts, and other permit applications and other states' websites.

Objection: EPE also discussed a dry intercooler configuration of the facility with GE.

Revised FOF 101: In undertaking its BACT analysis, EPE considered information from the TCEQ's BACT guidelines for simple cycle turbines, the RBLC database, vendors and engineering experts, and other permit applications and other states' websites. EPE also discussed the dry configuration of the plant with General Electric, the vendor of the plant.

102. The simple cycle combustion turbines in the RBLC or otherwise identified in the record, do not use control technologies in addition to or more effective than those that will be used by the Montana Power Station.

Objection: The simple cycle turbines can use a dry-hybrid intercooler technology to more efficiently control particulate emissions and several simple cycle turbines identified in the record are using this technology.

Revised FOF 102: The simple cycle combustion turbines in the RBLC use control technologies, including a dry-hybrid intercooler, that is more effective than those that will be used by the Montana Power Station.

103. There are no new technical developments that are both technically practicable and economically reasonable that offer the potential for EPE to further reduce the Montana Power Station's emissions.

Objection: The dry-hybrid configuration of the intercooler is BACT.

Revised FOF 103: The dry-hybrid configuration of the intercooler is a new technical development that is both technically practicable and economically reasonable that offers the potential for EPE to further reduce the Montana Power Station's PM emissions.

104. EPE did not consider combined cycle technology or other industrial processes to generate electricity as part of its BACT analysis because that would constitute redefinition of EPE's proposed power plant design.

Objection: Combined cycle would not redefine EPE's power plant design. Further configuring the plant's intercooler as dry-hybrid is not another industrial process, rather it is technology added on to the basic simple cycle turbine design.

Revised FOF 104: EPE should have considered combined cycle technology, as well as the dry-hybrid configuration of the facility, as part of its BACT analysis.

107. EPE will control NOx emissions from the combustion turbines during steady-state operations to 2.5 ppmvd corrected to 15% oxygen (on a three-hour rolling average basis) through the use of water injection, SCR technology, and staged air burners. This limit is lower than or equal to all prior BACT determinations for any comparable project, and the

record includes no evidence to suggest that a lower limit can be achieved.

Objection: The Montana Plant should be compared with combined cycle units because of the proposed hours of operation and the 57% capacity factor of the plant.

Revised FOF 107: EPE's NOx emissions from the combustion turbines should be compared with combined cycle facilities. A proper comparison necessitates lowering of the NOx emissions.

108. EPE will control CO emissions from the combustion turbines during steady state operations to 6.0 ppmvd corrected to 15% oxygen (on a three-hour rolling average basis) through the use of good combustion practices and an oxidation catalyst. This is consistent with prior BACT determinations for comparable projects, and the record includes no evidence to suggest that a lower limit can be cost-effectively achieved.

Objection: Due to lower exhaust temperatures and the high capacity factor, the BACT level for CO is not consistent with other plants that operate at lower actual capacity factors than the Montana Power Station.

Revised FOF 108: EPE's CO emissions from the combustion turbines should be compared with emissions from plants that operate at similar capacity and exhaust temperatures. A proper comparison necessitates lowering of the CO emissions.

110. EPE will meet a PM/PM10/PM, s limit of 6.0 lbs/hr, as guaranteed by the vendor of the combustion turbines. This is lower than or equal to all prior BACT determinations for any comparable project, and the record includes no evidence to suggest that a lower limit can be achieved.

Objection: A lower limit of particulate emissions can be achieved using dry-hybrid intercooler technology.

Revised FOF 110: EPE has not proposed BACT for particulate emissions. BACT for particulate is a dry-hybrid intercooler configuration, which will achieve lower emissions.

111. EPE will control VOC emissions from the combustion turbines to 2 ppmvd at 15% 02 through the use of an oxidation catalyst. This is lower than or equal to all prior BACT determinations for any comparable project, and the record includes no evidence to suggest that a lower limit can be achieved.

Objection: Due to the LMS100's lower exhaust temperatures and high capacity factor, BACT for VOCs is 1.0 ppm with a 1-hour averaging period. This limit has been achieved at the Huntington Beach combined cycle application.

Revised FOF 111: EPE will control VOC emissions from the combustion turbines

to 2 ppmvd at 15% 02 through the use of an oxidation catalyst. Due to the LMS100's lower exhaust temperatures and high capacity factor, BACT for VOCs should be 1.0 ppm with a 1-hour averaging period. This limit has been achieved at the Huntington Beach combined cycle application.

112. EPE will control NH_3 emissions to 5 ppmvd at 15% oxygen in order to meet the emission rate limits in the Draft Permit's MAERT, through careful control of NH_3 injection and operation of the SCR per the manufacturer's recommendations. This exceeds TCEQ's BACT level of 7-10 ppmvd for NH. The Draft Permit establishes 7 ppmvd at 15% oxygen as NH_3 BACT, which is within TCEQ's discretion.

Objection: The six LMS100 units under construction at the Haynes Generating Station in California have an ammonia limit of 5 ppm with 1 hour averaging.

Revised FOF 112: EPE will control NH_3 emissions to 5 ppmvd at 15% oxygen in order to meet the emission rate limits in the Draft Permit's MAERT, through careful control of NH_3 injection and operation of the SCR per the manufacturer's recommendations. This exceeds TCEQ's BACT level of 7-10 ppmvd for NH. The Draft Permit should establish 5 ppmvd at 15% oxygen as NH_3 BACT.

117. EPE reasonably calculated the PM10 and PM2.s mass fractions of total PM emissions from the evaporative cooling towers through the use of drift droplet diameter data presented in Joel Reisman and Gordon Frisbie's 'Calculating Realistic PM_{10} Emissions from Cooling Towers."

Objection: The Frisbie calculations underestimate the PM generated by the proposed intercooler cooling towers.

Revised FOF 117. EPE did not reasonably calculate the PM10 and PM2.5 mass fractions of total PM emissions from the evaporative cooling towers. EPE used inaccurate data presented in Joel Reisman and Gordon Frisbie's 'Calculating Realistic PM_{10} Emissions from Cooling Towers."

118. Because of hotter combustion air temperatures, a dry-cooled LMS100 would lose about 10 percent of its maximum-rated capacity in the peak summer months. In addition, a dry cooling system would impose a parasitic load of approximately 1% of net power output due to the power needed to drive the fan motors required in a dry cooling system.

Objection: EPE should have compared its system to a dry-hybrid intercooler system, not just a dry system.

Revised FOF 118: Because of hotter combustion air temperatures, a dry-cooled LMS100 would lose about 10 percent of its maximum-rated capacity in the peak

summer months. In addition, a dry cooling system would impose a parasitic load of approximately 1% of net power output due to the power needed to drive the fan motors required in a dry cooling system. The limitations of a dry system can be offset by the water savings acquired by a dry-hybrid system which should have been considered in this application.

119. Dry cooling of the intercoolers used at the Montana Power Station would result in reduced summer peaking capacity, higher auxiliary power requirements (parasitic losses), higher overall emissions, and higher costs relative to the configuration for which EPE seeks a permit.

Objection: There is no capacity reduction with the dry-hybrid intercooler. The parasitic loss cost is offset by water cost savings, and the levelized cost is comparable such that dry-hybrid is BACT.

Revised FOF 119: Dry-hybrid cooling of the intercoolers used at the Montana Power Station would provide comparable summer peaking capacity, lead to parasitic losses that would be offset by water saving, lead to lower overall emissions, and comparable levelized costs relative to the configuration for which EPE seeks a permit.

123. EPE established separate NOx and CO BACT emission limits for steady-state operations and start-up/shutdown periods. The Draft Permit's emission limits for startups and shutdowns reflect prudent operation of the turbines and their associated emission control equipment.

Objection: The start up and shut downs are excessive for a peaking facility and are not BACT.

Revised FOF 123: EPE established separate NOx and CO BACT emission limits for steady-state operations and start-up/shutdown periods, which are excessive and not BACT for a peaking facility. The Draft Permit's emission limits for startups and shutdowns do not reflect prudent peaking facility operation of the turbines and their associated emission control equipment.

124. The Draft Permit imposes conditions that meet or exceed BACT requirements for all proposed facilities and pollutants under all permitted operating conditions.

Objection: The permit does not meet BACT; BACT for PM is dry-hybrid intercooler in this case. Further, other emissions should be lowered to be consistent with the latest plants' performances.

Revised FOF 124: The Draft Permit fails to impose conditions that meet or exceed BACT requirements for all proposed facilities and pollutants under all permitted operating conditions.

133. But for the emergence of EPA-driven permitting requirements for greenhouse gases, the Montana Power Station project would not have triggered PSD review, and would have satisfied the requirements for a standard permit.

Objection: The facility must obtain a permit for its GHG emissions. TCEQ has taken over this important permitting function. This FOF shows a disrespect for the law and is irrelevant. FOF 133 should be struck.

135. EPE conducted an appropriate source impact analysis showing that the Montana Power Station's allowable emissions will not cause or contribute to air pollution in violation of any NAAQS or PSD increment.

Objection: EPE's flawed modeling means that there can be no conclusions regarding NAAQS or PSD compliance.

Revised FOF 135: EPE's modeling is insufficient and inadequate to predict whether the Montana Power Station's allowable emissions will or will not cause or contribute to air pollution in violation of any NAAQS or PSD increment.

139. EPE performed computerized air dispersion modeling to demonstrate the maximum air impacts expected to result from the Montana Power Station's emissions.

Objection: This inaccurately portrays EPE's modeling as accurate.

Revised FOF 139: EPE performed computerized air dispersion modeling to demonstrate the maximum air impacts expected to result from the Montana Power Station's emissions, using weather data and models that do not most scientifically and accurately predict the emissions of the facility.

140. EPE's modeling analysis demonstrates that the proposed project will not violate the NAAQS, cause an exceedance of the increment, cause an exceedance of ESLs, or have any adverse impacts on soils, vegetation, or Class I areas.

Objection: EPE's flawed modeling means that there can be no conclusions regarding NAAQS compliance.

Revised FOF 140: EPE's modeling analysis is insufficient to demonstrate that the proposed project will not violate the NAAQS, cause an exceedance of the increment, or have any adverse impacts on soils, vegetation, or Class I areas.

II. CONCLUSIONS OF LAW

4. Proper notice of EPE's Application was provided pursuant to Tex. Health & Safety Code §§ 382.0516,382.0517, and 382.056; Tex. Gov't Code§§ 2001.051 and 2001.052; and 30 Tex. Admin. Code (TAC) § 39.601, *et seq.*

Objection: The noticed application lacked preconstruction monitoring data.

Revised COL 4: Notice of EPE's Application was not proper pursuant to Tex. Health & Safety Code §§ 382.0516,382.0517, and 382.056; Tex. Gov't Code§§ 2001.051 and 2001.052; and 30 Tex. Admin. Code (TAC) § 39.601, *et seq.*, because preconstruction monitoring data were not in the permit application noticed to the public.

5. EPE properly submitted a complete Application pursuant to Tex. Health & Safety Code §§ 382.0515 and 382.0518; and 30 TAC §§ 116.ll0, 116.ll!, 116.140, and 116.404.

Objection: The noticed application lacked preconstruction monitoring data.

Revised COL 5: EPE did not properly submit a complete Application pursuant to Tex. Health & Safety Code §§ 382.0515 and 382.0518; and 30 TAC §§ 116.ll0, 116.ll1, 116.140, and 116.404, because the permit application lacked preconstruction monitoring data.

7. EPE met its burden of proof that the Application satisfies all applicable statutory and regulatory requirements.

Objection: EPE's modeling, BACT review and failure to include preconstruction monitoring data all are not in compliance with the law.

Revised COL 7: EPE has not met its burden of proof that the Application satisfies all applicable statutory and regulatory requirements.

8. In accordance with 40 C.F.R. § 52.21(k), as incorporated into TCEQ's rules at 30 TAC § 116.160(c)(2)(B), the Montana Power Station's emissions will not cause or contribute to air pollution in violation of any NAAQS in any air quality control region, or any applicable maximum allowable increase over the baseline concentration in any area.

Objection: EPE's inadequate modeling fails to support this conclusion.

Revised COL 8: In accordance with 40 C.F.R. § 52.21(k), as incorporated into TCEQ's rules at 30 TAC § 116.160(c)(2)(B), there is insufficient reliable modeling data to predict whether Montana Power Station's emissions will or will not cause or contribute to air pollution in violation of any NAAQS in any air quality control region, or any applicable maximum allowable increase over the baseline concentration in any area.

36. An applicant that is proposing to construct a simple cycle natural gas fired power plant with cooling towers is not required to include other electric generation technologies, such as combined cycle technology, in its BACT analysis.

Objection: Dry hybrid intercooler is not another "electric generation technology" and should have been considered.

Revised COL 36: An applicant that is proposing to construct a simple cycle natural gas fired power plant with cooling towers must consider all configurations of the facility such as a dry-hybrid intercooler configuration, in its BACT analysis.

38. In accordance with 30 TAC § 116.111(a)(2)(C) and applicable Commission and EPA policies, the Montana Power Station will utilize BACT, with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions from the facilities of which it will be comprised.

Objection: Dry Hybrid intercooler is BACT for PM.

Revised COL 38: In accordance with 30 TAC 116.111(a)(2)(C) and applicable Commission and EPA policies, the Montana Power Station will not utilize BACT, with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions from the facilities of which it will be comprised.

44. Because the Montana Power Station is a "major source" of greenhouse gas emissions, it is disqualified from using the Commission's standard permit for simple cycle turbines. Under EPA's "major for one, major for all" policy, if a site is a major source for one pollutant, then any other pollutant emitted above so-called "significant emission rates" also must go through PSD review.

Objection: This COL shows disdain for legal requirements to permit greenhouse gases. TCEQ has taken over this function under the CAA. The Commission should show respect for the law. This COL is irrelevant and should be struck.

47. Neither the submittal of a modeling report or of monitoring data in support of any application is considered an amendment of that application, as that term is used in Texas Health & Safety Code §382.029l(d).

Objection: This inaccurately explains the standards for what is required in a permit application.

Revised COL 47: EPE was required to include preconstruction monitoring data in its permit application. Those data should have been in the permit application noticed to the public.

48. Emissions from the Montana Power Station will not cause a violation of any NAAQS, an exceedance of any increment, an exceedance of ESLs, or have any adverse impacts on soils, vegetation, or Class I areas.

Objection: EPE's inadequate modeling fails to support this conclusion.

Revised COL 48: Inadequate modeling by EPE means that there is inadequate valid data to predict whether emissions from the Montana Power Station will or will not cause a violation of any NAAQS, an exceedance of any increment, or have any adverse impacts on soils,

vegetation, or Class I areas.

52. Based on these Findings of Fact and Conclusions of Law, EPE has made all demonstrations required under applicable statutes and regulations, including 30 TAC §116.111 regarding air permit applications, to be issued an air quality permit with PSD review, with conditions as set out in the Draft Permit.

Objection: EPE has not complied with modeling, preconstruction monitoring and BACT requirements.

Revised COL 52: Based on these Findings of Fact and Conclusions of Law, EPE has n o t made all demonstrations required under applicable statutes and regulations, including 30 TAC § 116.111 regarding air permit applications, to be issued an air quality permit with PSD review, with conditions as set out in the Draft Permit.

53. In accordance with Tex. Health & Safety Code § 382.0518(b)(2), emissions from the Montana Power Station will not contravene the intent of the TCAA and will be protective of the public's health and physical property, consistent with the long-standing interpretations of the Commission's rules, regulations, and guidance.

Objection: EPE's inadequate modeling fails to support this conclusion.

Revised COL 53: There are insufficient reliable modeling data to predict whether emissions from the Montana Power Station will or will not contravene the intent of the TCAA and will be protective of the public's health and physical property, consistent with the long-standing interpretations of the Commission's rules, regulations, and guidance, in accordance with Tex. Health & Safety Code § 382.0518(b)(2),

54. In accordance with Tex. Health & Safety Code § 382.0518(b), the Application for Air Quality Permit Nos. 102294 and PSD-TX-1290 should be granted, under the terms expressed in the Draft Permit.

Objection: The permit is not in compliance with many applicable laws and should not be granted.

Revised COL 54. In accordance with Tex. Health & Safety Code §382.0518(b), the Application for Air Quality Permit Nos. 102294 and PSD-TX-1290 should not be granted, under the terms expressed in the Draft Permit.

ISSUED:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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Bryan W. Shaw, Ph.D., Chairman For the Commission