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January 4, 2011

Ameila Rodriguez-Mendoza  
Travis County District Clerk  
Travis County District Courthouse  
P.O. Box 679003  
Austin, TX 78767-9003

*via E-Filing*

Re: **Sierra Club, Inc. v. Texas Commission on Environmental Quality; District Court**

Dear Ms. Rodriguez-Mendoza,

Enclosed is Sierra Club's Inc.'s Original Petition in the above referenced matter. Please feel free to contact me if you have any questions. Thank you for your attention to this matter.

Sincerely,



Gabriel Clark-Leach

**ENVIRONMENTAL INTEGRITY PROJECT,**  
Attorney for Sierra Club.

Enclosure

CAUSE NO. \_\_\_\_\_

SIERRA CLUB, INC.,

PLAINTIFF

VS.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY,

DEFENDANT.

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IN THE DISTRICT COURT OF TRAVIS COUNTY,

\_\_\_\_\_ JUDICIAL DISTRICT

**SIERRA CLUB, INC.’S ORIGINAL PETITION**

**TO THE HONORABLE JUDGE OF THE COURT:**

COMES NOW Sierra Club, Inc., (“Sierra Club”) and files this, its Original Petition against the Texas Commission on Environmental Quality (“TCEQ” or “Defendant”) and, in support thereof, would respectfully show the following:

**I. PARTIES**

1. Plaintiff Sierra Club, Inc., which was founded in 1892 by John Muir, is one of the oldest and largest grassroots environmental organizations in the country, with more than 700,000 members nationwide and with some 24,000 members in Texas. A number of those members live, work, and recreate in areas nearby and downwind of the proposed White Stallion Energy Center. These members will be affected by its construction and operation. Sierra Club is dedicated to exploring, enjoying, and protecting natural resources and wild places. Sierra Club promotes the responsible use of the earth’s ecosystems and resources, and educates and works to restore the natural environment. Sierra Club promotes renewable energy and efficiency as the safest, cleanest and most cost-effective solutions to the nation’s energy needs. Sierra Club and

its members are concerned about the White Stallion Energy Center for several reasons, including the mining of coal to be burned at the plant, the disposal of coal and petroleum coke waste, and the air emissions and air pollution caused by burning coal and other solid fuels at the White Stallion Energy Center. Sierra Club participated as a party in proceedings before the Texas Commission on Environmental Quality below and is aggrieved by the order this suit challenges.

2. Defendant, Texas Commission on Environmental Quality is the Texas state administrative agency responsible for protecting our state's air quality and for issuing permits (under both state and federal Clean Air Acts) to air-polluting facilities. Defendant may be served through its Executive Director, Mr. Mark Vickery, at 12100 Park 35 Circle, MC-109, Austin, Travis County, Texas 78753.

3. White Stallion Energy Center, LLC, the Environmental Defense Fund, the No Coal Coalition, and the Office of Public Interest Counsel were parties in the proceedings before TCEQ, and are being served with a copy of this petition through their attorneys of record in accordance with Section 2001.176(b)(2) of the Texas Government Code. Administrative Law Judges Keeper and Qualtrough of the State Office of Administrative Hearings ("SOAH") are also being served.

## **II. JURISDICTION AND VENUE**

4. Jurisdiction of this action lies in this court pursuant to TEX. GOV'T CODE § 2001.171, Tex. Health & Safety Code § 382.032(a), and TEX. WATER CODE § 5.351.

5. Venue is proper in this court under TEX. GOV'T CODE § 2001.176(b)(1), Tex. Health & Safety Code § 382.032(a), and Tex. Water Code § 5.354. Sierra Club timely filed a motion for

rehearing of the Final Order that is challenged, which motion for rehearing was overruled by operation of law no earlier than December 8, 2010.

### **III. DISCOVERY**

6. This case is an appeal of an administrative agency's actions. If discovery becomes necessary, it should be controlled by Level 3. TEX. R. CIV. PROC. § 190.4.

### **IV. SUMMARY OF THE CASE**

7. Sierra Club seeks an order reversing Defendant's October 19, 2010, Final Order in Docket No. 2009-0283-AIR ("Final Order").<sup>1</sup> This order authorizes the construction and operation of a new solid fuel-fired power plant by approving the application of White Stallion Energy Center, LLC (White Stallion, or Applicant) for state and federal air pollution permits.

8. The new facility is a large solid fuel-fired power plant to be constructed about eight miles south of Bay City in Matagorda County, Texas. The proposed site is very close to the Houston-Galveston-Brazoria ozone non-attainment region,. The White Stallion Energy Center will use four circulating fluidized bed ("CFB") boilers burning Illinois Basin coal and petroleum coke to produce a gross electric output of approximately 1,320 Megawatts ("MW") and approximately 1,200 MW net. The White Stallion facility will release many tons of ozone forming pollutants, air toxics, and particulate matter each year.

### **V. STATEMENT OF THE FACTS**

9. White Stallion filed its Application for State Air Quality Permit 86088, Prevention of Significant Deterioration Permit PSD-TX-1160, Plantwide Applicability Limit PAL26, and

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<sup>1</sup> While under the jurisdiction of the State Office of Administrative Hearings ("SOAH"), the proceedings bore the SOAH docket number, 582-09-3008.

Hazardous Air Pollutant Permit HAP28 on September 5, 2008, and supplemented it from time to time thereafter.

10. On March 13, 2009, the Defendant's Executive Director completed its technical review of the Application and prepared Draft Permit Nos. 86066, PSD-TX-1160, HAP28, and PAL26 (collectively "the Draft Permit") and the Preliminary Determination Summary.

11. Sierra Club timely filed public comments regarding defects in White Stallion's Application on October 31, 2008. No Coal Coalition timely filed joint comments with Sustainable Energy and Economic Development (or "SEED") Coalition, and Public Citizen on April 14, 2009.<sup>2</sup>

12. On April 14, 2009, EPA submitted a comment letter to the TCEQ concerning White Stallion's Application. This letter raised concerns about White Stallion's ozone analysis, the monitoring requirements in the Draft Permit, and the inclusion of a Plantwide Applicability Limit authorization in the Draft Permit. EPA also submitted a comment letter on April 20, 2009 addressing its concerns with White Stallion's MACT Application.

13. White Stallion's Application was directly referred to SOAH at the request of the Applicant on February 27, 2009.

14. A preliminary hearing was held on April 20, 2009. Sierra Club and the No Coal Coalition were admitted as parties along with White Stallion, the Defendant's Executive Director, and others.

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<sup>2</sup> Though Environmental Integrity Project represented No Coal Coalition and Sierra Club in proceedings before the TCEQ, we do not represent No Coal Coalition in this appeal of the TCEQ's Final Order.

15. On October 2, 2009, the Executive Director filed its Response to Comments on White Stallion's Application.
16. On August 8, 2009, White Stallion pre-filed its direct case and exhibits with SOAH.
17. On September 23, 2009, EPA published a proposed rule in the *Federal Register* concerning Texas' Plantwide Applicability Limit ("PAL") program. The provision proposed disapproval of Texas' PAL program because it was incompatible with the requirements of the federal Clean Air Act. 74 Fed. Reg. 48,467, 48,469, 48,474 (September 23, 2009).
18. On November 2, 2009 Sierra Club and No Coal Coalition, and the Defendant's Executive Director pre-filed their direct cases and exhibits with SOAH.
19. On November 20, 2009, parties filed objections to pre-filed testimony and exhibits. Responses to these objections were filed on December 9, 2009. On December 14, 2009, the Administrative Law Judges filed an order in response to objections to parties' pre-filed testimony and exhibits. This order sustained objections to Sierra Club and No Coal Coalition's pre-filed testimony and exhibits concerning IGCC on relevance grounds.
20. On January 8, 2010, Sierra Club and No Coal Coalition filed with SOAH a request for commission to depose a representative of Haldor Topsoe, Inc. ("Haldor Topsoe") regarding the feasibility of Selective Catalytic Reduction to control pollutant emissions from coal and petroleum coke-fired CFB boilers, like those to be used at the White Stallion Energy Center. Haldor Topsoe is a leading designer and vendor of catalysts used to control emissions from large solid-fuel fired boilers like those proposed by White Stallion. White Stallion filed a motion opposing Sierra Club and No Coal Coalition's request on January 11, 2010. Sierra Club and No Coal Coalition filed a response to White Stallion's motion on the same day.

21. On January 14, 2010 Administrative Law Judges denied Sierra Club and No Coal Coalition's request for a commission to depose a Haldor Topsoe representative without explanation.
22. On January 15, 2010 Applicant White Stallion pre-filed its rebuttal testimony and exhibits.
23. On February 9, 2010, EPA published a final rule containing a new National Ambient Air Quality Standard for NO<sub>2</sub> based upon a 1-hour averaging time. This new 1-hour NAAQS for NO<sub>2</sub> became effective on April 12, 2010. 75 Fed. Reg. 6,474.
24. On February 16, 2010, Sierra Club and No Coal Coalition made an offer of proof to preserve error with respect to pre-filed testimony and evidence concerning IGCC and greenhouse gasses, including carbon dioxide that the ALJs excluded from the record.
25. The hearing on the merits before SOAH took place in Austin from February 10- 18, 2010.
26. On February 10, 2010, EPA filed its third comment letter on White Stallion's Application. This letter addressed various defects in White Stallion's Application, again focusing on Applicant's failure to conduct a proper ozone demonstration.
27. On June 22, 2010, EPA published a final rule containing a new NAAQS for SO<sub>2</sub> based on a 1-hour averaging time. The new 1-hour NAAQS for SO<sub>2</sub> became effective on August 23, 2010. 75 Fed. Reg. 35,520.
28. After the close of the evidentiary record, the following documents were filed with the TCEQ : on July 2, 2010, the ALJs issued a Proposal for Decision ("PFD"), which did not

recommend approval of the Application; on July 5, 2010, the ALJs issued a Proposed Order for White Stallion's Application containing proposed findings of fact ("FOF") and conclusions of law ("COL"); on July 26, 2010, parties filed exceptions to the ALJs' PFD and proposed order; on August 8, 2010, parties filed their replies to exceptions to the PFD and proposed order; and on August 11, 2010, the ALJs responded to exceptions.

29. On September 15, 2010, EPA finalized its proposed disapproval of Texas' PAL program. 75 Fed. Reg. 56,424 (September 15, 2010).

30. On September 29, 2010, Defendant heard oral argument from the parties regarding the ALJs' PFD. Defendant recommended approval of White Stallion's Application.

31. On September 29, 2010, EPA Region 6 submitted a letter to Defendant indicating that the White Stallion Application was deficient that its PSD and HAP authorizations should not be issued until the deficiencies were cured. In this letter, EPA Region 6 requested that Defendant withhold action on the permit for 90 days, so that EPA and Defendant could discuss the permit record.

32. Nonetheless, Defendant signed the Final Order on October 19, 2010. Defendant mailed the Final Order to the parties on or about October 22, 2010.

33. Sierra Club and No Coal Coalition timely filed a motion for rehearing, which was overruled by operation of law on or about December 8, 2010. A copy of Sierra Club and No Coal Coalition's motion for rehearing is attached as Exhibit 1.

## VI. CAUSES OF ACTION

Plaintiff alleges the following causes of action or points of error:

**Error No. 1: The Defendant Erred as a Matter of Law by Failing to Consider Alternative Production Processes or Innovative Fuel Combustion Techniques, Including Integrated Gasification Combined Cycle Systems (“IGCC”).**

34. The federal definition of Best Available Control Technology (“BACT”) requires consideration of alternative production processes and innovative fuel combustion techniques, such as IGCC, in the BACT review of a preconstruction air permit application. 42 U.S.C. §§ 7479(3) and 7475(a)(4); TEX. HEALTH and SAFETY CODE § 382.0518(b)(1).<sup>3</sup>

35. BACT is defined as an emission limitation based on:

“the maximum degree of reduction for each pollutant subject to regulation under [the Clean Air] Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.” 40 C.F.R. § 52.21(b)(12) (emphasis added) (incorporated by reference at 30 TEX. ADMIN. CODE § 116.160(c)(1)(A)).

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<sup>3</sup> TEX. HEALTH and SAFETY CODE § 382.0518(b)(1) requires that TCEQ find that White Stallion will use at least BACT.

36. Defendant's currently approved Prevention of Significant Deterioration ("PSD") State Implementation Plan ("SIP")<sup>4</sup> requires that Defendant apply the federal definition of BACT in its BACT review of preconstruction air permit applications.<sup>5</sup> Defendant incorrectly assumed that inclusion of IGCC is not required under a BACT review because Defendant believed it would require a substantial redefinition of White Stallion's proposed facility. As EPA pointed out in two comment letters addressed to TCEQ concerning White Stallion's Application, this assumption is contrary to the plain language of the federal definition of BACT, as incorporated in the Texas SIP.<sup>6</sup> Defendant's failure to consider IGCC is arbitrary and capricious and unsupported by substantial evidence. See TEX. GOV'T CODE § 2001.174(2)(F). As a result, Defendant's Final Order violated 42 U.S.C. § 7475(a)(4) and TEX. HEALTH and SAFETY CODE § 382.0518(b)(1) as a matter of law. Defendant also failed to require that White Stallion demonstrate that emissions from its proposed facility would comply with BACT requirements as required by TEX. ADMIN. CODE § 116.111(a)(2)(C). FOF Nos. 255, 256, and 259, and COL Nos. 46, 47, and 49 are in error. The Court should reverse or remand under Texas Gov't Code §§ 2001.174(2)(A) and (E)-(F).

**Error No. 2: The Administrative Law Judges Erred by Excluding Plaintiff's IGCC Evidence as Irrelevant.**

37. As part of its direct case before the agency, Sierra Club's expert witness William Powers pre-filed testimony concerning IGCC, its costs and its benefits. This evidence was sufficient to support a finding that IGCC is technically practicable, economically reasonable, and capable of

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<sup>4</sup> The Texas SIP is Defendant's plan for achieving and maintaining the National Ambient Air Quality Standards in Texas. It consists of TCEQ's regulations implementing the requirements of the federal Clean Air Act, including preconstruction permitting requirements. 40 C.F.R. § 52.2270.

<sup>5</sup> 74 Fed. Reg. 48,467 at 48, 472 (September 23, 2009).

<sup>6</sup> See Attachments A and C to Exhibit 1.

greater pollution reductions than the production process proposed in White Stallion's Application. It was also sufficient to support a finding that requiring IGCC would not constitute a fundamental redesign of the proposed facility. This evidence supports a finding that IGCC is BACT for White Stallion. White Stallion and the TCEQ's Executive Director objected to this testimony on relevance grounds, because they contended that applicants in Texas are not required to consider alternative production processes as part of a BACT analysis. As stated in point of error 1 above, this view is erroneous as a matter of law. Nonetheless, the Administrative Law Judges sustained these objections and Plaintiff's IGCC testimony (and supporting evidence) was excluded from the record. Though it was not required, Plaintiff timely made an offer of proof to ensure that error on the ALJs' ruling was preserved.<sup>7</sup> Because Plaintiff's IGCC evidence was excluded, Plaintiff was improperly deprived of an opportunity to present evidence demonstrating that further reductions of harmful emissions that adversely impact the interests of Sierra Club and its members are technically practicable and economically reasonable using IGCC, and that IGCC is required as a BACT control technology for the White Stallion Energy Center. The striking of this testimony deprived Sierra Club of an opportunity to present relevant evidence supportive of its case, and that deprived Sierra Club of the process it was due under the 14<sup>th</sup> Amendment of the U.S. Constitution; Art. I, § 19 of the Constitution of the State of Texas; and §§ 2001.051 and 2001.081 of the Texas Government Code.

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<sup>7</sup> 30 TEX. ADMIN. CODE § 80.127(d)(3) states that "[i]f an exhibit has been identified, objected to, and excluded, it may be withdrawn by the offering party. If withdrawn, the exhibit will be returned and the offering party waives all objections to the exclusion of the exhibit. If not withdrawn, the exhibit shall be included in the record for the purpose of preserving the objection to the exclusion of the exhibit." (emphasis added)

**Error No. 3: The Defendant Erred by Failing to Require an Adequate National Ambient Air Quality Standard Demonstration for Ozone.**

38. 40 C.F.R. § 52.21(k), which has been adopted into the Texas SIP, requires that an applicant for a PSD permit demonstrate that emissions of ozone (precursors) from the proposed facility will not “cause or contribute” to a violation of the ozone NAAQS. 30 TEX. ADMIN. CODE §§ 116.160(c)(2), 101.21. This demonstration must be made before a PSD permit for a proposed major source, like the White Stallion Energy Center, may properly issue. 30 TEX. ADMIN. CODE § 116.111(a)(2)(I)<sup>8</sup>. White Stallion’s Application failed to demonstrate that emissions from the White Stallion Energy Center will not cause or contribute to a violation of NAAQS for ozone, and therefore Defendant’s decision to issue White Stallion’s permit was in error.

39. TCEQ’s own rules required White Stallion’s ozone demonstration to be based upon “applicable air quality models and modeling procedures specified in the EPA Guideline on Air Quality Models, as amended, or models and modeling procedures currently approved by the EPA for use in the state program, and other specific provisions made in the prevention of significant deterioration state implementation plan.” 30 TEX. ADMIN. CODE § 116.160(d). In cases where use of an EPA approved air quality model is inappropriate, the rule provides that another model may be substituted, “[b]ut, [s]uch change shall be subject to notice and opportunity for public hearing and written approval of the administrator of the EPA.” *Id.* (emphasis added).

40. Neither White Stallion nor the TCEQ conducted ozone modeling to demonstrate compliance with ozone NAAQS using procedures approved by EPA or developed an alternative

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<sup>8</sup> Moreover, 30 TEX. ADMIN. CODE § 116.110 requires an applicant to obtain a permit under 116.111 before construction of a major source of air pollution, like the White Stallion Energy Center may commence.

approach subject to notice and opportunity for public hearing that was approved by the administrator of the EPA.

41. White Stallion's ozone demonstration is further flawed because it relied upon ozone monitoring data from Aransas Pass monitors when more representative monitoring data from ozone monitors located closer to the proposed site was available (e.g., monitors located in Brazoria county). Moreover, the Aransas Pass monitoring data relied upon by Applicant and Defendant, as the ALJs found, was not intended for use for regulatory purposes. Monitoring data from monitors located closer to the proposed site was excluded, not because it was less representative of conditions at the proposed site, but because those monitors are located within the Houston-Galveston-Brazoria non-attainment area.

42. The ozone demonstration conducted by White Stallion relied upon a draft TCEQ guidance document, which has no reliable basis in science. This guidance document, and the methodology it describes, has never been subject to public notice and comment, and has not been approved by the EPA for use in the state program. In fact, EPA has clearly indicated that certain bases of the TCEQ's guidance, including its reliance upon Scheffe Point Source Screening Tables to determine whether emissions from the White Stallion facility will be ozone neutral, was improper.<sup>9</sup>

43. Because White Stallion's inadequate demonstration of compliance with the ozone NAAQS was based upon a non-EPA approved methodology that has not been subject to notice and a public hearing, TCEQ's Final Order was erroneous as a matter of law. 40 C.F.R. § 52.21(k); 30 TEX. ADMIN. CODE § 116.160(c)(2). Moreover, because—(i) Defendant's draft

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<sup>9</sup> See Attachment B to Sierra Club and No Coal Coalition's Motion for Rehearing, Attached as Exhibit 1. For additional discussion of EPA's concerns regarding White Stallion's ozone demonstration, See Attachments A and C to Exhibit 1.

guidance document allows an applicant to cherry-pick monitoring data for its demonstration that may be less representative than other readily available data; and (ii) the draft guidance document's methodology is not based upon reliable science—the demonstration of compliance with the NAAQS based upon this draft guidance document does not support a finding that emissions from the White Stallion facility will not cause or contribute to the violation of the ozone NAAQS. Thus, FOF Nos. 38, 103-112.a, 347.b, 388, and COL Nos. 5, 7, 12, 13, 14, 23, 43, 44, 74, 75, 77, and 78 are arbitrary and capricious as a matter of law and are unsupported by substantial evidence considering the reliable and probative evidence in the record as a whole. The Court should reverse or remand under TEX. GOV'T CODE §§ 2001.174(2)(A)-(C) (E), and (F).

**Error No. 4: The Defendant Erred by Failing to Address the New 1-Hour National Ambient Air Quality Standards for Nitrogen Dioxide and Sulfur Dioxide.**

44. 40 C.F.R. § 52.21(k), which has been adopted into the Texas SIP, requires that the Applicant demonstrate that its proposed emissions of nitrogen dioxide (“NO<sub>2</sub>”) and sulfur dioxide (“SO<sub>2</sub>”) will not “cause or contribute” to a violation of the NO<sub>2</sub> and SO<sub>2</sub> 1-hour NAAQS.<sup>10</sup> Section 382.0518(b)(2) of the Texas Health and Safety Code requires that Defendant find no indication that emissions of NO<sub>2</sub> and SO<sub>2</sub> from the White Stallion Energy Center will contravene the intent of the Texas Clean Air Act, including protection of the public's health and physical property.

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<sup>10</sup> 30 TEX. ADMIN. CODE § 116.160(c)(2). In 1971, EPA promulgated a NAAQS for NO<sub>2</sub> and SO<sub>2</sub>. 36 Fed. Reg. 8,187 (April 30, 1971). TCEQ adopts the NAAQS by reference at 30 TEX. ADMIN. CODE § 101.21.

45. On February 9, 2010, EPA published a final rule containing a new NAAQS standard for NO<sub>2</sub> based upon a 1-hour averaging time. 75 Fed. Reg. 6,474. This new 1-hour NAAQS for NO<sub>2</sub> became effective on April 12, 2010. Id.

46. On June 22, 2010, EPA published a final rule containing a new NAAQS for SO<sub>2</sub> based on a 1-hour averaging time. 75 Fed. Reg. 35,520. The new 1-hour NAAQS for SO<sub>2</sub> became effective on August 23, 2010. Id.

47. There is no evidence in the record demonstrating that emissions from the White Stallion Energy Center will not cause or contribute to a violation of the 1-hour NO<sub>2</sub> and SO<sub>2</sub> NAAQS. Because these demonstrations are required to be made before the TCEQ may issue a PSD permit to a major source like the White Stallion Energy Center, Defendant's Final Order granting White Stallion's PSD permit was in error. The Final Order violates 40 C.F.R. § 52.21(k) and §382.0518(b)(2) of the Texas Health and Safety Code as a matter of law.

48. The *Federal Register* passage approving Texas' PSD program incorporates a letter from the Texas Air Control Board (a TCEQ predecessor agency) committing Texas to "implementation of EPA decisions regarding PSD program requirements."<sup>11</sup> EPA's final rules promulgating 1-hour NAAQS for NO<sub>2</sub> and SO<sub>2</sub> are decisions regarding PSD program requirements within the purview of this commitment letter. TCEQ's failure to require White Stallion to demonstrate compliance with these 1-hour NAAQS is contrary to Texas' commitment to implement EPA decisions regarding PSD program requirements.

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<sup>11</sup> Letter from Eli Bell, Executive Director of the Texas Air Control Board, to Robert Layton, Regional Administrator of the U.S. EPA (September 5, 1989) at 2 is attached as Exhibit 2 to this petition. The letter is incorporated by EPA's final approval of Texas' PSD program. 57 Fed. Reg. 28,093 at 28,098 (June 24, 1992).

49. FOF No. 62 is in error, because no modeling was conducted to establish whether emissions from the White Stallion facility will cause or contribute to a violation of 1-hour NAAQS for NO<sub>2</sub> and SO<sub>2</sub>. FOF No. 63 is in error, because it fails to take account of the 1-hour SO<sub>2</sub> NAAQS averaging period. FOF Nos. 78, 347.b and COL Nos. 14 and 23 are in error because White Stallion made no demonstration that allowable emissions from its facility will not cause or contribute to air pollution in violation of the 1-hour NO<sub>2</sub> and SO<sub>2</sub> NAAQS. Likewise, FOF 276 is in error because a finding that White Stallion's NO<sub>x</sub> limits are sufficiently stringent to protect the 1-hour NO<sub>2</sub> NAAQS is not supported by substantial evidence. The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A), (B) (E), and (F).

**Error No. 5: The Defendant Erred by Including a Non-SIP-Approved Plantwide Applicability Limit in White Stallion's Permit.**

50. Special Condition No. 39 of White Stallion's permit is a Plantwide Applicability Limit ("PAL"). The PAL is the sum of allowable emissions listed in the permit's maximum allowable emission rate table ("MAERT") and allows White Stallion to avoid federal new source review preconstruction requirements that might otherwise be triggered by future modifications to the proposed facility, so long as the modifications do not cause plant emissions to exceed the PAL limits.

51. TCEQ's PAL rules have never been a federally approved part of its PSD SIP. Recently, EPA expressly disapproved Texas' PAL program, because it is inconsistent with federal law. 75 Fed. Reg. at 56,424, 56,438 (September 15, 2010). In its disapproval, EPA specifically noted that Texas' PAL rules are inconsistent with federal law insofar as these rules "lack[] a provision which limits applicability of a PAL only to an *existing* major stationary source. 75 Fed. Reg.

56,438. The White Stallion Energy Center is a proposed new stationary source, and thus TCEQ's issuance of White Stallion's PAL permit is inconsistent with the Texas SIP and federal law. TCEQ is required by federal law to enforce its SIP and cannot administer the federal Clean Air Act pursuant to amended rules that are not approved by the EPA as a SIP revision. The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A)-(C) and (F).

**Error No. 6: The Defendant erred by Failing to Require Sufficiently Stringent Best Available Control Technology Limits for Nitrogen Oxide, Volatile Organic Compounds, and Carbon Monoxide.**

52. BACT requires that the Defendant set the lowest limits "achievable" in its preconstruction air permits. 42 U.S.C. §§ 7479(3) (definition of BACT) and 7475(a)(4); Tex. Health and Safety Code § 382.0518(b)(1); 40 C.F.R. § 52.21(b)(12) (incorporated by reference at 30 TEX. ADMIN. CODE § 116.160(c)(1)(A)). While a state agency may reject a lower limit based on data showing the project does not have "the ability to achieve [the limit] consistently," *In re Newmont*, 2005 EPA App. LEXIS 29 at \*30-31, it may only do so based on a detailed record establishing an adequate rationale. Time and time again for each of the BACT regulated pollutants, the record does not include a detailed technical explanation for why a higher control efficiency cannot be achieved consistently, resulting in a more stringent emission limit under the BACT requirements. Instead the Defendant erroneously relies on bare assertions of the Applicant's experts that they simply cannot meet more stringent limitations without providing a detailed record of why more stringent limits cannot be met.

53. Defendant erroneously established BACT limits for NO<sub>x</sub> emissions from the White Stallion Energy Center based upon the use of Selective Non-Catalytic Reduction ("SNCR").

More stringent BACT limits should have been established based upon the use of Selective Catalytic Reduction, which is a demonstrated, commercially available technology capable of achieving much greater NO<sub>x</sub> reductions than SNCR. Expert testimony offered by Sierra Club and No Coal Coalition demonstrated that the installation and operation of SCR at the White Stallion Energy Center would be economically reasonable and technically practicable. The Executive Director's Permit Writer testified that, based upon his consideration of evidence presented at the hearing by Protestant expert witnesses, SCR is a technically feasible NO<sub>x</sub> control for the White Stallion Energy Center. White Stallion and Defendant failed to present evidence rebutting this testimony and evidence. Moreover, the conclusion that SCR is not technically practicable and economically reasonable is not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole. Thus, because SCR is capable of achieving much greater NO<sub>x</sub> control than the SNCR system proposed by the Applicant, and at a reasonable cost without undue collateral environmental and energy impacts, Defendant failed to satisfy BACT. Moreover, White Stallion and TCEQ's rejection of SCR as the top NO<sub>x</sub> control option was not based upon a well-developed record establishing a rationale.<sup>12</sup>

54. Use of a "tail-end" SCR, which is an SCR unit placed after the particulate controls (e.g., a baghouse) in a pollution control train allows an oxidation catalyst to "piggyback" in the SCR housing at a relatively low cost. An oxidation catalyst is a carbon monoxide ("CO") and volatile organic compound ("VOC") control technology that is demonstrated, commercially available, and capable of achieving reductions in emission of CO and VOC beyond those required by the

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<sup>12</sup> See Error No. 7, below. A consulting firm hired by Applicant indicated that it was willing to guarantee the performance of SCR on a unit like the White Stallion Energy Center, and Applicant and TCEQ both failed to diligently pursue this lead.

White Stallion permit. Sierra Club and No Coal Coalition offered expert testimony that operation of an oxidation catalyst to control CO and VOC emissions from the White Stallion facility would be economically reasonable. Furthermore, the collateral benefits of increased CO and VOC reductions should have been considered—but were not—as part of Defendant’s evaluation of SCR. White Stallion and Defendant failed to present evidence rebutting Sierra Club and No Coal Coalition’s testimony and evidence. Moreover, the conclusion that an oxidation catalyst is not technically practicable or economically reasonable is not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole.

55. Defendant erroneously established BACT emission limits for SO<sub>2</sub> emissions from the White Stallion Energy Center based upon the use of dry scrubbing. Wet scrubbing is a commercially available and demonstrated technology capable of achieving SO<sub>2</sub> reductions beyond those required as BACT in White Stallion’s permit. Sierra Club and No Coal Coalition presented expert testimony and evidence establishing that wet scrubbing was technically practicable and economically reasonable for the White Stallion facility. Neither White Stallion nor the Defendant offered evidence rebutting Sierra Club and No Coalition’s testimony and evidence. Moreover, the conclusion that wet scrubbing is not technically practicable or economically reasonable is not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole.

56. Defendant’s failure to establish NO<sub>x</sub> limits based on use of SCR, SO<sub>2</sub> limits based on use of wet scrubbing, and CO and VOC limits based on the use of an oxidation catalyst violates 42 U.S.C. § 7475(a)(4) and Tex. Health & Safety Code § 382.0518(b)(1). The aforementioned control technologies are commercially available, technically practicable, economically

reasonable, and the record demonstrates that their use will allow for reductions of federally regulated pollutants beyond those required by Defendant's Final Order. Moreover, no party has presented substantial evidence demonstrating that collateral impacts render these control technologies unavailable. These control technologies, and numerical limits based upon their use, constitute BACT for the White Stallion Energy Center. As Sierra Club and No Coal Coalition argued at length in its post-hearing briefs before the TCEQ, Defendant's BACT review and the limits established pursuant to that review are also contrary to Defendant's BACT guidance and arbitrary in applying that guidance. FOF Nos. 278, 283, 286, 288, 290, 291, 292, 293, 315, 317, 319, 320, 321, 322, and COL Nos. 46, 47, and 50 are in error. The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A), (E), and (F).

**Error No. 7: The Administrative Law Judge's Erred by Denying Sierra Club No Coal Coalition's Request for Commission To Take a Deposition.**

57. 30 TEX. ADMIN. CODE § 80.153(a) provides that “[u]pon proper request by a party, the judge shall issue subpoenas and commissions to take depositions according to the APA (emphasis added).” See also, TEX. GOV'T CODE § 2001.094. On January 8, 2010, Sierra Club and No Coal Coalition filed with SOAH a request for commission to depose a representative of Haldor Topsoe, Inc. regarding the feasibility of selective catalytic reduction to control pollutant emissions from coal and petroleum coke-fired CFB boilers, like the White Stallion Energy Center. This request was made in compliance with the requirements of 30 TEX. ADMIN. CODE § 80.153. On January 14, 2010, the Administrative Law Judges issued SOAH Order 12 denying Sierra Club and No Coal Coalition's request without explanation. Sierra Club and No Coal Coalition objected to ALJs' refusal to provide a basis for their denial of the request to take deposition. ALJs' denial of Sierra Club's request without explanation was contrary to 30 TEX.

ADMIN. CODE § 80.153(a) and TEX. GOV'T CODE § 2001.094, which provide that an ALJ shall issue a commission to take a deposition upon the proper request by a party. The ALJs' denial is an abuse of discretion, and constitutes reversible error.

58. On January 22, 2010, shortly after Sierra Club and No Coal Coalition filed their request for commission to take deposition, White Stallion submitted its Fifth Supplemental Rule 194 Disclosures. These disclosures included a memo of a phone conversation between Andy Ungerman of Stanley Consultants Inc. and Nate White of Haldor Topsoe, which occurred on December 8, 2009. Stanley Consultants Inc. was retained by White Stallion to assist in developing the basic design for the White Stallion Energy Center. Haldor Topsoe is an internationally established catalyst vendor. According to this memo, which was submitted into evidence as Sierra Club and No Coal Coalition Exhibit 320, Mr. White indicated that Haldor Topsoe was willing to provide a performance guarantee on a tail-end SCR for a CFB facility like White Stallion, but could not specify the particular terms of any such guarantee without specific project information. Inexplicably, White Stallion took no steps to provide Haldor with specific project information needed to establish the terms of a potential guarantee. Had Sierra Club and No Coal Coalition's request for commission to take deposition been granted, as was proper, Plaintiff would not have been deprived of an opportunity to gather particularly probative evidence in light of Applicant's convenient lack of diligence. Plaintiff could have introduced this evidence during its cross-examination of White Stallion and Executive Director witnesses. The ALJs' denial of Sierra Club and No Coal Coalition's request deprived Plaintiff of an opportunity to respond to and present evidence and argument on each issue involved in the case as required by TEX. GOV'T CODE § 2001.051.

**Error No. 8: The Defendant erred by failing to conduct a PM<sub>2.5</sub> specific analysis.**

59. 40 C.F.R. § 52.21(k), which has been adopted into the Texas SIP, requires that the Applicant demonstrate that its proposed emissions of PM<sub>2.5</sub> will not “cause or contribute” to a violation of the PM<sub>2.5</sub> NAAQS. 30 TEX. ADMIN. CODE § 116.160(c)(2).<sup>13</sup> Section 382.0518(b)(2) of the Texas Health & Safety Code requires that Defendant find no indication that emission of PM<sub>2.5</sub> from the White Stallion Energy Center will contravene the intent of the Texas Clean Air Act, including protection of the public’s health and physical property.

60. Defendant has the duty to establish BACT limits for each federally regulated criteria pollutant that a proposed source has the potential to emit in significant amounts. Tex. Health & Safety Code § 382.0518(b)(1); 30 TEX. ADMIN. CODE §§ 116.111(a)(2)(C), 40 C.F.R. § 52.21(b)(12).

61. The Defendant erred by granting White Stallion’s PSD permit, because the record upon which its decision was based contained no PM<sub>2.5</sub>-specific analysis. Neither Applicant nor the Defendant performed a BACT analysis or conducted dispersion modeling for PM<sub>2.5</sub>. Rather, Defendant erroneously determined that, as a matter of policy, a demonstration of compliance with PSD permitting requirements for PM<sub>10</sub> was sufficient to establish compliance with permitting requirements for PM<sub>2.5</sub>. To justify this decision, Defendant mistakenly relies on EPA’s interim PM<sub>2.5</sub> surrogacy policy.

62. As EPA informed Defendant in its February 10, 2010 letter<sup>14</sup> concerning White Stallion’s Application, reliance on the surrogacy policy as a matter of course was not proper, and that in

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<sup>13</sup> In 1997, EPA adopted a NAAQS for PM<sub>2.5</sub>. 62 Fed. Reg. 38,652 (July 18, 1997). TCEQ adopts the NAAQS by reference at 30 TEX. ADMIN. CODE § 101.21.

<sup>14</sup> See Attachment C to Exhibit 1.

order to properly rely on the interim surrogacy policy, White Stallion was required to submit a revised application or demonstration using case-specific facts to establish a finding that PM10 is an adequate surrogate for PM<sub>2.5</sub> in this specific permit. White Stallion never provided this demonstration, and thus Defendant's reliance on EPA's surrogacy policy was not proper.

63. As a result, Defendant violated 42 U.S.C. §§ 7412, 7471, 7475, and 7479(3) and Tex. Health & Safety Code §§ 382(b)(1) & (2) as a matter of law. FOF Nos. 98-101, and 306-307 are not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole. The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A), (E), and (F).

**Error No. 9: The Defendant Erred in Setting BACT Limits for Total PM and PM<sub>2.5</sub>**

64. In the PFD, the ALJs found that 0.016 lb/MMBtu is BACT for Total PM and PM<sub>2.5</sub>. However, the Commission did not accept this recommended limit and issued a final permit to White Stallion establishing a limit of 0.025 lb/MMBtu as BACT for Total PM and PM<sub>2.5</sub>. Defendant's Final Order contains a section entitled, "Explanation of Changes." This section indicates that Defendant adopted the ALJs' proposed order granting White Stallion's application with certain changes to the ALJs' findings of fact regarding BACT limits for Total PM and PM<sub>2.5</sub>. TEX. GOV'T CODE § 2003.047(m) grants Defendant authority to amend an ALJ's proposal for decision, including any finding of fact, but requires all such amendments to be accompanied by an explanation of the basis of the amendment. The Commission did not provide the requisite explanation of the basis of this amendment, nor does the Final Order provide a basis for the conclusion that 0.025 lb/MMBtu is the proper BACT limit for total PM and PM<sub>2.5</sub>. Accordingly, Defendant's amendment of the ALJs' proposed limits for Total PM and PM<sub>2.5</sub> was

arbitrary and capricious and an abuse of discretion. FOF Nos. 303 and 304 are unsupported by substantial evidence. The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A), (E), and (F).

**Error No. 10: The Defendant's Maximum Achievable Control Analysis was Conducted Contrary to Law and the MACT Limits Established are Insufficiently Stringent.**

65. MACT case-by-case requirements are among the strictest in the federal Clean Air Act and MACT case-by-case limits may be no less stringent than the emission control achieved in practice by the best controlled similar source regardless of cost. 40 C.F.R. § 63.41; 30 TEX. ADMIN. CODE § 116.15. The term “similar source” is defined broadly to include all units with comparable emissions that can be controlled using the same control technology. 40 C.F.R. § 63.41; 61 Fed. Reg. 68,384, 68,394 (Dec. 27, 1996).

66. MACT limits must be even more stringent than the emission control achieved in practice by the best performing similar source if further reductions are achievable, taking into consideration the cost of achieving further reductions and any non-air quality health and environmental impacts. 40 C.F.R. § 63.41; 30 TEX. ADMIN. CODE § 116.15(7).

67. MACT case-by-case limits must be established for each hazardous air pollutant (“HAP”) a plant will emit. Defendant has allowed the Applicant to utilize surrogates to demonstrate that the White Stallion Energy Center will satisfy MACT. Reliance on HAP surrogates is only proper if the three part test articulated in *National Lime v. EPA* is satisfied: (1) the surrogate and the class of pollutants it represents are invariably present together in the emissions; (2) the applicable control technology indiscriminately captures both the surrogate and the represented pollutants; and (3) these controls are the only means by which the facility can achieve reductions

in the pollutants. *Sierra Club v. EPA*, 353 F.3d 976, 984 (D.C. Cir. 2004) (citing *National Lime, v. EPA*, 233 F.3d 625, 639 (D.C. Cir. 2000)).

68. FOF Nos. 351, and 353-378 are in error, because the record does not contain evidence supporting: (i) the use of HAP surrogates; (ii) Defendant and Applicant's overly-narrow construction of the term "similar source" for purposes of its MACT floor evaluation; (iii) Defendant's failure to consider stack testing and performance data to determine the level of performance actually achieved by the best performing similar source for each HAP; and (iv) the Defendant's failure to establish MACT limits consistent with levels either achieved by, or limits approved in permits for similar sources. Defendant's Final Order violates case-by-case MACT requirements as a matter of law, its construction of similar source for purposed of White Stallion's MACT review was arbitrary and capricious, and an abuse of discretion, and the limits settled upon in White Stallion's permit for HAP and HAP surrogates are unsupported by substantial evidence. The Court should reverse or remand under The Court should reverse or remand under TEX. GOV'T CODE § 2001.174(2)(A), (E), and (F).

**Error No. 11: The Defendant Erred by Failing to Consider or Address Greenhouse gases, Including Carbon Dioxide ("CO<sub>2</sub>").**

69. The Texas Health & Safety Code requires that TCEQ ensure that emissions from the White Stallion Energy Center will not endanger the public's health and physical property or contravene the intent of the Texas Clean Act. Tex. Health & Safety Code § 382.0518(b)(2). The purpose of the Texas Clean Air Act is to "safeguard the state's air resources from pollution by controlling or abating air pollution and emissions of air contaminants...." Tex. Health & Safety Code § 382.002. Carbon dioxide is an "air contaminant" as defined by the Texas Clean Air Act.

Tex. Health & Safety Code § 382.003(2). It is also an “air pollutant” as defined by the Texas Clean Air Act. Tex. Health & Safety Code § 382.003(3). Defendant’s failure to consider the impacts from, and minimize emissions of CO<sub>2</sub> and other greenhouse gasses from the White Stallion Energy Center is contrary to Tex. Health & Safety Code §§ 382.0518(b)(2) and 382.011(a) and (b). As a result, Defendant violated Tex. Health & Safety Code § 382.0518(b)(2) as a matter of law. Defendant’s failure to consider evidence concerning CO<sub>2</sub> and greenhouse gasses was arbitrary and capricious. FOF Nos. 32, 131, 248, and COL Nos. 5, 48, 76, and 77 are in error. The Court should reverse or remand under TEX. GOV’T CODE § 2001.174(2)(A)-(F).

**Error No. 12: The Administrative Law Judges Erred in Excluding Evidence Regarding Greenhouse Gas Emissions.**

70. Sierra Club and No Coal Coalition offered pre-filed evidence related to greenhouse gas emissions and CO<sub>2</sub>. All such evidence was stricken and excluded by the ALJs, who found that the evidence was irrelevant. Though it is not required by Defendant’s contested case rules, Sierra Club and No Coal Coalition timely made an offer of proof concerning its greenhouse gas and CO<sub>2</sub> testimony and evidence. As argued in Error No. 11 above, this evidence is relevant and the ALJs’ exclusion of this evidence violated statutory provisions, including TEX. GOV’T CODE §§ 382.0518(b), 382.011 (a) and (b),. Furthermore, the striking of the testimony deprived Sierra Club of the opportunity to present relevant evidence supportive of its case, and that deprived Sierra Club of the process it was due under the 14<sup>th</sup> Amendment of the U.S. Constitution; Art. I, § 19 of the Constitution of the State of Texas; and TEX. GOV’T CODE §§ 2001.051 and .081. Striking this testimony resulted in errors to FOF Nos. 32, 131, 248, and COL Nos. 5, 48, 76, and 77.

**VII. PRAYER FOR RELIEF**

71. WHEREFORE, premises considered, Plaintiff respectfully prays that this Court reverse TCEQ's Final Order, remand this case to TCEQ for further proceedings consistent with the Court's opinion, assess all costs of these proceedings to Defendant, and grant all other relief in law or equity to which Plaintiff may be entitled.

Respectfully Submitted,

**ENVIRONMENTAL INTEGRITY PROJECT**

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**CERTIFICATE OF SERVICE**

I certify that on January 4, 2011, this petition was served by certified mail, return receipt requested, on all counsel of record:

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Gabriel Clark-Leach



# **EXHIBIT 1**



SOAH DOCKET NO. 582-09-3008  
TCEQ DOCKET NO. 2009-0283-AIR

APPLICATIONS OF WHITE §  
STALLION ENERGY CENTER, § BEFORE THE TEXAS COMMISSION §  
LLC FOR STATE AIR QUALITY §  
PERMIT 86088; PREVENTION OF §  
SIGNIFICANT DETERIORATION §  
AIR QUALITY PERMIT PSD-TX- § ON §  
1160 AND FOR HAZARDOUS AIR §  
POLLUTANT MAJOR SOURCE §  
[FCAA § 112(g)] PERMIT HAP-28 § ENVIRONMENTAL QUALITY §  
AND PLANTWIDE §  
APPLICABILITY LIMIT PAL-48 §

**SIERRA CLUB/NO COALITION'S MOTION FOR REHEARING**

# **TABLE OF CONTENTS**

<b>I. INTRODUCTION AND SUMMARY .....</b>	<b>1</b>
<b>II. DISCUSSION AND ANALYSIS .....</b>	<b>2</b>
<b>A. Burden of Proof .....</b>	<b>2</b>
<b>B. The Commission Improperly Relied on Non-Indexed Rules, Orders or Decisions.....</b>	<b>2</b>
<b>C. NO<sub>2</sub> and SO<sub>2</sub> 1-Hour National Ambient Air Quality Standards (NAAQS) .....</b>	<b>3</b>
<b>D. Ozone.....</b>	<b>6</b>
i) Applicant Failed to Conduct Adequate Modeling.....	6
<b>E. Fine Particulate Matter/PM<sub>2.5</sub>.....</b>	<b>9</b>
<b>F. Best Available Control Technology .....</b>	<b>12</b>
ii) Generally .....	13
iii) Clean Fuels .....	14
iv) Failure to Consider Alternative Production Processes or Innovative Combustion Techniques .	16
v) Nitrogen Oxide (NO <sub>x</sub> ) .....	18
vi) Sulfur Dioxide (SO <sub>2</sub> ).....	20
vii) Carbon Monoxide and Volatile Organic Compounds .....	21
viii) Total Particulate Matter and PM <sub>2.5</sub> .....	22
ix) Monitoring .....	23
<b>G. Maximum Achievable Control Technology (MACT) .....</b>	<b>27</b>
<b>H. Plantwide Applicability Limit (PAL) Permit .....</b>	<b>28</b>
<b>I. Carbon Dioxide (CO<sub>2</sub>) .....</b>	<b>29</b>
<b>III. CONCLUSION .....</b>	<b>30</b>

**SOAH DOCKET NO. 582-09-3008  
TCEQ DOCKET NO. 2009-0283-AIR**

**APPLICATIONS OF WHITE § BEFORE THE TEXAS COMMISSION  
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POLLUTANT MAJOR SOURCE §  
[FCAA § 112(g)] PERMIT HAP-28 §  
AND PLANTWIDE §  
APPLICABILITY LIMIT PAL-48 § ENVIRONMENTAL QUALITY**

**SIERRA CLUB/NO COALITION'S MOTION FOR REHEARING**

TO THE HONORABLE CHAIRMAN SHAW AND COMMISSIONERS GARCIA AND  
REBINSTEIN:

COMES NOW, Sierra Club/No Coal Coalition (Protestants) and pursuant to the rules of the  
Commission files this motion for rehearing of your October 19, 2010 Order in the above-  
captioned docket.

**I. INTRODUCTION AND SUMMARY**

This motion for rehearing sets forth the particular findings of fact and conclusions of law  
that do not comply with the requirements of the Federal Clean Air Act, the Texas Clean Air Act,  
and regulations promulgated to implement these statutes. Should the Commissioners or General  
Counsel like additional briefing on any of the issues presented herein, Protestants refer the  
Commission and General Counsel to the extensive briefing in this docket. Insofar as it does  
not contradict our motion for rehearing, Protestants adopt and incorporate the motion for  
rehearing filed by Environmental Defense Fund in this docket.

## **II. DISCUSSION AND ANALYSIS**

### **A. Burden of Proof**

30 TAC §§ 55.210 and 80.17(a) require an applicant to prove, by a preponderance of the evidence, that the application satisfies all statutory and regulatory requirements. As described below, White Stallion failed to carry its burden on many important issues. Thus, COL 7 is in error. In particular, White Stallion failed to prove by a preponderance of the evidence that emissions from its proposed facility: (i) will not contribute to a violation of National Ambient Air Quality Standards (NAAQS) for NO<sub>2</sub>, SO<sub>2</sub>, Ozone, and PM<sub>2.5</sub>; (ii) will satisfy Maximum Achievable Control Technology (MACT) case-by-case requirements; and (iii) will satisfy Best Available Control Technology (BACT) requirements. Applicant also failed to prove that the monitoring by the permit is sufficient to make permit limits practicably enforceable, and that the state effects review was properly conducted.

### **B. The Commission Improperly Relied on Non-Indexed Rules, Orders or Decisions.**

TCEQ and predecessor agencies have never established a file for all of its past orders or a cross reference to orders that would provide any assistance in determining if there were any significant interpretations of laws or rules in the orders. The agency does have a docket system and maintains some orders in the Office of Chief Clerk. That overall effort is not yet adequate. It is certainly not a system that allows regulated entities, the public, or even staff to determine what interpretations of law, rules or guidance have been made by the Commission in its past statements of policy or prior final orders. Any reliance on “long standing interpretation of the Commission’s rules, regulations, and guidance” that has not been indexed pursuant to Tex. Gov’t Code §§ 2001.004 and .005 and Texas Water Code § 5.121 is clear error. Thus, FOF Nos. 49,

61, 99, 103-107, 111-112a, 243-247, 258, 259, 264, 265, 272, 273, 286, 292, 307, 362, 372, 379 and COL Nos. 11, 12, 13, 23, 24, 25, 37, 39, 48-50 are in error.

### C. NO<sub>2</sub> and SO<sub>2</sub> 1-Hour National Ambient Air Quality Standards (NAAQS)

On February 9, 2010, EPA published a final rule containing a new National Ambient Air Quality Standard (NAAQS) for NO<sub>2</sub> based on a 1-hour averaging time.<sup>1</sup> This new 1-hour NAAQS for NO<sub>2</sub> became effective on April 12, 2010.<sup>2</sup> On June 22, 2010, the EPA published a final rule containing a new NAAQS for SO<sub>2</sub> based on a 1-hour averaging time.<sup>3</sup> The new 1-hour NAAQS for SO<sub>2</sub> became effective on August 23, 2010.<sup>4</sup> As the Executive Director admitted in its Response to Exceptions in this matter, White Stallion was required to demonstrate that emissions increases from the White Stallion Energy Center will not cause or contribute to a violation of the new NO<sub>2</sub> and SO<sub>2</sub> NAAQS before a PSD permit could properly issue.<sup>5</sup> No such demonstration was made.

It is undisputed that before a PSD permit may issue for a major proposed source, like the White Stallion Energy Center, an applicant must “demonstrate that allowable emission increases from the proposed source, in conjunction with all other applicable emissions increases...would not cause or contribute to air pollution in violation of...[a]ny national ambient air quality standard[.]”<sup>6</sup> The new NO<sub>2</sub> and SO<sub>2</sub> 1-hour standards are NAAQS for which White Stallion must make a compliance demonstration.

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<sup>1</sup> 75 Fed. Reg. 6474.

<sup>2</sup> *Id.*

<sup>3</sup> 75 Fed. Reg. 35520.

<sup>4</sup> *Id.*

<sup>5</sup> Executive Director’s Reply to Exceptions at 6.

<sup>6</sup> 40 CFR § 52.21(k). Texas has incorporated 40 CFR § 52.21(k) at 30 Tex. Admin. Code § 116.160(c)(2). *See also* 30 TAC § 101.21 (“The National Primary and Secondary Ambient Air Quality Standards as promulgated pursuant to section 109 of the Federal Clean Air Act, as amended, will be enforced throughout all parts of Texas.”)

Generally, the EPA has interpreted the Clean Air Act and PSD program regulations to require that each final PSD permit decision reflect consideration of any NAAQS that is in effect at the time a final permit is issued.<sup>7</sup> This policy reflects the more general principle that “permitting and licensing decisions of regulatory agencies must reflect the law in effect at the time the agency makes a final determination on a pending application.”<sup>8</sup> With respect to the NO<sub>2</sub> 1-hour standard, EPA has issued guidance stating that permits issued under 40 CFR § 52.21 on or after April 12, 2010 must contain a demonstration that the source’s allowable emissions will not cause or contribute to a violation of the new 1-hour NO<sub>2</sub> NAAQS.<sup>9</sup> The preamble to the new NO<sub>2</sub> NAAQS states that “major new and modified sources applying for NSR/PSD permits will initially be required to demonstrate that their proposed emission increases of NO<sub>2</sub> will not cause or contribute to a violation of either the annual or 1-hour NO<sub>2</sub> NAAQS and the annual PSD increment.”<sup>10</sup> The text of the final SO<sub>2</sub> 1-hour NAAQS rule is also unambiguous on this point:

The owner or operator of any major stationary source or major modification obtaining a final PSD permit on or after effective date of the new 1-hour SO<sub>2</sub> NAAQS will be required, as a prerequisite for the PSD permit, to demonstrate that the emissions increases from the new or modified source will not cause or contribute to a violation of that new NAAQS.<sup>11</sup>

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<sup>7</sup> April 1, 2010 Letter from Stephen Page, EPA Director of Office of Air Quality Planning and Standards to Air Division Directors and Deputies Regions I-X regarding applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards at 2.

<sup>8</sup> *Id.* (citing *Ziffrin v. United States*, 318 U.S. 73, 78 (1943); *State of Alabama v. EPA*, 557 F.2d 1101, 1110 (5th Cir. 1977); *In re: Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 614-616 (EAB 2006); *In re: Phelps Dodge Corp.*, 10 E.A.D. 460 478 n. 10 (EAB 2002).)

<sup>9</sup> *Id.* at 3; June 29, 2010 memorandum from Stephen Page to Regional Air Division Directors, Guidance Concerning the Implementation of the 1-hour NAAQS for the Prevention of Significant Deterioration Program at 1; February 12, 2010 Letter from Gregg M. Worely, Chief of EPA Region 4 Air Permits Section to Sean Alteri regarding East Kentucky Power Cooperative’s J.K. Smith Plant at 1; September 29, 2010 letter from Lawrence Starfield, Deputy Regional Administrator EPA Region 6 to Mark Vickery, Executive Director of the TCEQ regarding White Stallion Energy Center at 2 (Attachment A).

<sup>10</sup> 75 Fed. Reg. 6474, 6525

<sup>11</sup> 75 Fed. Reg. 35520, 35578 (June 22, 2010).

This position is consistent with TCEQ's interim guidance documents for the new 1-hour NO<sub>2</sub> and SO<sub>2</sub> standards, which states:

- “As of April 12, 2010, applicants must demonstrate compliance with the 1-hour [NO<sub>2</sub>] NAAQS.”<sup>1213</sup>
- “As of August 23, 2010, applicants must demonstrate compliance with the 1-hour SO<sub>2</sub> NAAQS.”<sup>14</sup>

The Federal Register passage for the final approval of Texas' PSD program incorporates a letter from the Texas Air Control Board committing Texas to “implementation of EPA decisions regarding PSD program requirements.”<sup>15</sup> The EPA's final rules promulgating 1-hour NAAQS for NO<sub>2</sub> and SO<sub>2</sub> reflect its decision that new sources receiving PSD permits after the effective date of these rules are required to demonstrate compliance with the new NAAQS. The TCEQ's failure to require White Stallion to demonstrate compliance with the new NAAQS is inconsistent with its obligation under the PSD SIP to implement EPA decisions regarding PSD program requirements.<sup>16</sup>

The record does not contain a demonstration that emissions from the proposed White Stallion facility will comply with the new 1-hour NO<sub>2</sub> and SO<sub>2</sub> standards. Therefore, the Commission erred by issuing White Stallion's permit.

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<sup>12</sup> *Interim 1-Hour Nitrogen Dioxide (NO<sub>2</sub>) NAAQS Implementation Guidance*, July 22, 2010 at 2.

<sup>13</sup> 30 TAC § 116.160(d).

<sup>14</sup> *Interim 1-Hour Sulfur Dioxide (SO<sub>2</sub>) NAAQS Implementation Guidance*, August 1, 2010 at 2.

<sup>15</sup> Letter from Eli Bell, Executive Director of the Texas Air Control Board to Robert Layton, Regional Administrator of the U.S. Environmental Protection Agency (September 5, 1989) at 2 (Attachment E). The letter is incorporated by EPA's final approval of Texas' PSD program at 57 Fed. Reg. 28098 (June 24, 1992).

<sup>16</sup> See also Attachment A.

FOF 62 is in error, because no modeling was conducted to establish whether emissions from the White Stallion facility will cause or contribute to a violation of 1-hour NAAQS for NO<sub>2</sub> and SO<sub>2</sub>.

FOF 63 is in error, because it fails to take account of the 1-hour SO<sub>2</sub> NAAQS averaging period.

FOF Nos. 78, 347.b and COL Nos. 14, 23 are in error because White Stallion made no demonstration that allowable emissions from its facility will not cause or contribute to air pollution in violation of the 1-hour NO<sub>2</sub> and SO<sub>2</sub> NAAQS.

Likewise, FOF 276 is in error because a finding that White Stallion's NO<sub>x</sub> limits are sufficiently stringent to protect the 1-hour NO<sub>2</sub> NAAQS is not supported by substantial evidence.

#### **D. Ozone**

White Stallion's Application failed to demonstrate that emissions from the WSEC would not cause or contribute to a violation of NAAQS for ozone. Because this demonstration is a prerequisite for the proper issuance of a PSD permit, the Commission's decision to grant White Stallion's permit was in error.<sup>17</sup>

##### **i) Applicant Failed to Conduct Adequate Modeling**

TCEQ's rules unambiguously required White Stallion to estimate ambient ozone concentrations "based on the applicable air quality models and modeling procedures specified in the EPA Guideline on Air Quality Models, as amended, or models and modeling procedures currently approved by the EPA for use in the state program, and other specific provisions made

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<sup>17</sup> 40 CFR § 52.21(k); 30 TAC § 116.160(c)(2)(B) (incorporating 40 CFR § 52.21(k) into TCEQ rules); 30 TAC § 116.11(a)(2)(II).

in the prevention of significant deterioration state implementation plan.”<sup>18</sup> If the air quality model approved by the EPA or specified in the EPA Guideline was inappropriate, 116.160(d) states “the model may be modified or another model may be modified or another model substituted....But, [s]uch a change shall be subject to notice and opportunity for public hearing and written approval of the administrator of the EPA.”<sup>19</sup>

Neither White Stallion nor the Executive Director conducted ozone modeling using procedures approved by the EPA or developed an alternative approach that was approved by the administrator of the EPA. In fact, EPA submitted three different comment letters in this matter informing White Stallion and the ED that White Stallion’s ozone analysis was not sufficient to demonstrate compliance with the ozone NAAQS.<sup>20</sup>

In its initial April 14, 2009 Comment Letter, EPA expressed concern that no modeling protocol had been developed or submitted by the Applicant as indicated by the TCEQ’s Air Quality Modeling Guidelines.<sup>21</sup> EPA also stated that if the Applicant or TCEQ had relied upon TCEQ guidance based upon Scheffe Point Source Screening Tables to determine that emissions from the White Stallion facility would be ozone neutral, that this reliance was improper.<sup>22</sup> Given that the White Stallion facility is proposed immediately outside the Houston-Galveston-Brazoria ozone non-attainment area, EPA cautioned that “the only modeling technique that would seem technically appropriate for this source would be a CAMx based analysis using available modeling databases.”<sup>23</sup>

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<sup>18</sup> 30 TAC § 116.160(d).

<sup>19</sup> *Id.*

<sup>20</sup> *See* Attachments A-C.

<sup>21</sup> Attachment B

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

Mr. Tran, a qualified expert in ozone modeling, also testified that Applicant's modeling was inadequate to demonstrate compliance with ozone NAAQS. In the face of EPA's concerns and the testimony of Mr. Tran, neither the Applicant nor the ED made any attempt to develop a more refined modeling protocol or to conduct air dispersion modeling using CAMx. Mr. Tran's modeling predicts that at specific 8 hour averaging periods represented in the 2005 modeling episode, White Stallion emissions would generate daily maximum 8 hour average concentrations of 2ppb-4ppb of additional ozone at discrete locations within the HGB non-attainment area.<sup>24</sup> Additionally, Mr. Tran's modeling predicts that White Stallion's emissions will cause areas within the HGB non-attainment area that were in compliance with the NAAQS to violate the 8 hour NAAQS for ozone.<sup>25</sup>

White Stallion's reliance on ozone monitoring data from Aransas Pass when more representative monitoring data from ozone monitors located closer to the proposed site was available (e.g., monitors located in Brazoria county) is particularly problematic. Monitoring data from Brazoria county was excluded, because it is part of the eight county HGB non-attainment area, and not because this data was less representative of conditions at the proposed site. Protestants also remain concerned that the monitoring data relied upon by White Stallion was not intended to be used for regulatory purposes.

Equally problematic is the fact that the NO<sub>x</sub> to VOC ratio that is the basis for Step 2 of TCEQ's Draft Ozone Procedures has no basis in reliable science. Thus, any demonstration based upon this NO<sub>x</sub> to VOC ratio is insufficient to show that emissions from a proposed facility will not cause localized ozone impacts.

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<sup>24</sup> SC/NCC Ex. 102 at 8.

<sup>25</sup> *Id.* at 8.

Given (i) that TCEQ's own rules require applicants to use EPA approved modeling procedures for demonstrations that emissions will not cause or contribute to a violations of NAAQS; (ii) White Stallion failed to use EPA approved modeling procedures to demonstrate compliance with ozone NAAQS; and (iii) the Draft Ozone Procedures relied upon by White Stallion are not based upon reliable science, and do not provide a reasonable basis for determining whether emissions from the proposed White Stallion facility will not cause or contribute to a violation of the ozone NAAQS, White Stallion's permit was issued in error. Accordingly, FOF Nos. 38, 103-112.a 347.b, 388, and COL Nos. 12, 13, 14, 23, 43, 44, 74, 75, 77, 78 are in error.

#### **E. Fine Particulate Matter/PM<sub>2.5</sub>**

In 1997, EPA identified fine particles with a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>) as a pollutant that is subject to regulation under the Clean Air Act, separate and distinct from larger, or "coarse," particles (PM<sub>10</sub>).<sup>26</sup> Regulation of PM<sub>2.5</sub> in addition to PM<sub>10</sub> was necessary given the differing health effects, exposure patterns, and physical differences between the two pollutants.<sup>27</sup>

TCEQ has the duty to regulate PM<sub>2.5</sub> emissions as part of PSD permitting program. In particular, TCEQ must establish BACT limits for each federally regulated criteria pollutant that a proposed source would have the potential to emit in significant amounts.<sup>28</sup> For purposes of PSD review, federally regulated new source review pollutants include "any pollutant for which a

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<sup>26</sup> 62 Fed. Reg. 38,652, 38,711 (July 18, 1997).

<sup>27</sup> 71 Fed. Reg. 61,144, 61, 147 (October 17, 2006); 71 Fed. Reg. 65,984, 65,993 (November 1, 2005).

<sup>28</sup> Tex. Health & Safety Code § 382.0518(b)(1); 30 TAC §§ 116.11(a)(2)(C), 116.711(3); 40 C.F.R. § 52.21(b)(12); *Blue Skies Alliance v. TCEQ*, 283 S.W.3d 525 at 534(Tex.App—Amarillo 2009).

national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the United States Environmental Protection Agency.”<sup>29</sup>

Neither White Stallion nor the ED performed a BACT analysis or conducted dispersion modeling for PM<sub>2.5</sub>. Thus, the Applicant did not demonstrate that emissions from the White Stallion facility will comply with BACT and that they will not cause or contribute to a violation of the NAAQS.<sup>30</sup>

Rather than require White Stallion to make these demonstrations as part of its Application, the TCEQ erroneously determined that, as a matter of policy, a demonstration of compliance with PSD permitting requirements for PM<sub>10</sub> was sufficient to establish compliance with permitting requirements for PM<sub>2.5</sub>.<sup>31</sup> To justify this decision, TCEQ mistakenly relies on EPA’s interim PM<sub>2.5</sub> surrogacy policy.

On October 23, 1997, EPA issued a memorandum from John S. Seitz regarding implementation of the 1997 NAAQS standards for PM<sub>2.5</sub> entitled, “*Interim Implementation for the New Source Review Requirements for PM<sub>2.5</sub>*” (“Seitz Memorandum”).<sup>32</sup> According to this memorandum:

In view of the significant technical difficulties that *now* [in 1997] exist with respect to PM<sub>2.5</sub> monitoring, emissions estimation, and modeling...EPA believes that PM<sub>10</sub> may properly be used as a surrogate for PM<sub>2.5</sub> in meeting NSR requirements until these difficulties are resolved.”<sup>33</sup>

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<sup>29</sup> 30 TAC § 116.12(14)(A).

<sup>30</sup> 42 USC §§ 7475(a)(3) and (4); 30 TAC §§ 116.111(a)(2)(B) and (I).

<sup>31</sup> FOF 98.

<sup>32</sup> ED Ex. 36.

<sup>33</sup> *Id.*

Thus, from the beginning, applicability of EPA's so-called surrogacy policy was conditioned upon the persistence of "technical difficulties" associated with the regulation of PM<sub>2.5</sub> in 1997. The purpose of that policy was to provide time for the development of necessary tools to calculate the emissions of PM<sub>2.5</sub> and related precursors, adequate modeling techniques to project ambient impacts, and PM<sub>2.5</sub> monitoring sites.<sup>34</sup> Because these technical difficulties were resolved well before TCEQ issued White Stallion's final permit, reliance on the interim surrogacy policy was not justified.<sup>35</sup>

EPA unambiguously told the TCEQ that reliance on the surrogacy policy was no longer proper as a matter of course in its February 10, 2010 Comment Letter regarding White Stallion's Application:

We have reviewed the TCEQ's Response No.4 in the RTC filed on October 2, 2009, regarding PM<sub>2.5</sub>. However, we have concerns regarding TCEQ's reliance on the PM<sub>10</sub> surrogacy policy. It is now necessary to provide a demonstration to support the use of PM<sub>10</sub> as a surrogate PM<sub>2.5</sub>. The applicant should submit a revised application or demonstration addressing PM<sub>2.5</sub>. *See, In re Louisville Gas and Electric*, Petition No. IV-2008-3 (Order on Petition). The additional information should either address PM<sub>2.5</sub> emissions directly or show how compliance with the PSD requirements for PM<sub>10</sub> will serve as an adequate

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<sup>34</sup> 70 Fed. Reg. 65984, 66043 (Nov. 1, 2005).

<sup>35</sup> *See, e.g., Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards*, 70 Fed. Reg. 65,984, 66,043 (Nov. 1, 2005) (noting that "those difficulties have been resolved in most respects, and where they have not been resolved, the proposal contains appropriate provisions to account for it."); 73 Fed. Reg. at 28, 340 (nothing that "with this final action and technical developments in the interim, the difficulties have largely been resolved"); *see also, In re S. Mont. Elec. Generation Transmission Coop.-Highwood Generating Station Air Quality Permit No. 3423-00*, Case No. BER 2007 AQ, at 26-28 (Mont. Bd. Env'tl. Rev. May 30, 2008) (finding that it was feasible to set BACT limits for PM<sub>2.5</sub> emissions using existing test methods, emissions estimates from manufacturers, and design alternative equipment, work practices, or operational standards to reduce emission of PM<sub>2.5</sub>).

surrogate for meeting the PSD requirements for PM<sub>2.5</sub> in this specific permit, after considering and identifying any remaining technical difficulties with conducting an analysis of PM<sub>2.5</sub> directly. The permit record must reflect a demonstration to support the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub>.<sup>36</sup>

This additional information was never submitted. Thus, reliance on EPA's interim surrogacy policy was improper and the Commission's finding that BACT for PM<sub>2.5</sub> was properly considered as a subset of PM<sub>10</sub> is not supported by substantial evidence. Accordingly, FOF Nos. 98-101, and 306-307 are in error.

#### **F. Best Available Control Technology**

White Stallion has failed to demonstrate that emissions from its proposed facility will satisfy BACT as required under Texas and federal law.<sup>37</sup> Thus, the Commission erred by issuing a PSD permit to White Stallion. In particular, the Commission erred in finding that (i) proposed limits and associated control technologies for NO<sub>x</sub>, SO<sub>2</sub>, CO, and VOC represent BACT<sup>38</sup>; and (ii) White Stallion was not required to consider IGCC or clean fuels as part of its BACT analysis.

Though more stringent controls for NO<sub>x</sub>, SO<sub>2</sub>, and VOC are available, the Commission failed to find these controls are required BACT control technologies for White Stallion. The Commission's finding was not supported by case-specific objective indicators that these technologies were unreasonable or otherwise not achievable.<sup>39</sup> Thus, the Commission erred.

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<sup>36</sup> Attachment C. See also Attachment A.

<sup>37</sup> 42 U.S.C. § 7479(3); 30 TAC § 116.111(a)(2)(C); 30 TAC 116.160(c)(1)(A).

<sup>38</sup> Thus, FOF 255 and COL 76 are in error. The White Stallion facility will not use the most stringent emissions control technology. The most stringent control technology available for NO<sub>x</sub> is SCR. The most stringent control technology available to control SO<sub>2</sub> is wet scrubbing. The most stringent control technology available for CO and VOC is an oxidation catalyst.

<sup>39</sup> Thus, FOF 256 is in error.

## ii) Generally

Protestants disagree with the conclusion that even a proper Tier 1 review was conducted under the Executive Director's draft guidance document, RG-383.<sup>40</sup>

An agency must choose the lowest limit "achievable." While a state agency may reject a lower limit based on data showing the project does not have "the ability to achieve [the limit] consistently," it may only do so based on a detailed record establishing an adequate rationale.<sup>41</sup> Time and again for each of the BACT regulated pollutants, the record does not include a detailed technical explanation for why a higher control efficiency cannot be achieved consistently, resulting in a more stringent emission limit under the BACT requirements. Instead, the Order erroneously relies on bare assertions of the Applicant's experts that they simply cannot – without providing a detailed record of why not – and that no one else has done it. This does not comply with the plain language of the statute, rule or even Tier 1 of draft RG-383.

COL 50 is error because it misconstrues TCEQ BACT guidance, it is in conflict with COL 46, and it is contrary to the federal definition of BACT that is incorporated by reference in Texas' PSD regulations. BACT, by definition, is an emissions limitation based on the maximum degree of reduction achievable for each pollutant subject to regulation, taking into account energy, environmental impacts, and other costs.<sup>42</sup> If greater pollution reductions than proposed are achievable (taking into account potential collateral impacts) using a different control technology than proposed by an applicant, then limits based upon the alternative control technology are BACT, regardless of when that technology was developed. COL 50 also misconstrues TCEQ's BACT guidance document, RG-383. According to RG-383:

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<sup>40</sup> Thus, FOF Nos 253 and 258 are in error.

<sup>41</sup> *In re Newmont*, 2005 EPA App. LEXIS 29 at \*30-31.

<sup>42</sup> 40 CFR § 52.21(b)(12) incorporated by reference at 30 TAC § 116.160(c)(1)(A).

The BACT for any particular industry is not static. Instead, BACT progresses as technology progresses or as process developments occur. Subsequent to the most recent permit reviews for the same industry, it is possible that information has become available to indicate that even better performance can be achieved than that proposed.<sup>43</sup>

Thus, RG-383 is not properly read to allow an applicant or the ED to disregard technical developments that occurred prior to the most recent BACT reviews. Rather, this section directs the TCEQ and applicants to consider *information* that has become available since the most recent permit reviews indicating that better performance than proposed is achievable. In this case, information that a catalyst vendor was willing to guarantee the performance of SCR at the White Stallion facility is clearly information that became available subsequent to the most recent permit reviews and that the TCEQ should have considered as part of its BACT evaluation. Moreover, if the TCEQ is permitted to disregard technical developments that occurred prior to the most recent permit reviews, there can be no assurance that BACT limits established to a TCEQ BACT review are as stringent as those that would be reached using EPA's top down methodology. Finally, insofar as COL 46 suggests that a 40 CFR § 52.21(b)(12) BACT review was not required in this case, it is in error. 40 CFR § 52.21(b)(12) is incorporated by reference by the Texas PSD rules, and the Commission must establish BACT limits that comply with that rule.

### **iii) Clean Fuels**

TCEQ is required to consider the use of clean fuels in its BACT analyses, so FOF 264 is in error. EPA's final authorization of Texas' PSD program incorporates a letter from Steve

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<sup>43</sup> ED Ex. 3 at Draft Page 16.

Spaw of the TACB to Stanley Meiburg, Director of Air Pesticides and Toxics Division of EPA Region 6 that states, “[w]e will consider in our evaluation of PSD applications clean fuels as an available means of reducing emissions, along with other approaches in our BACT analysis.”<sup>44</sup> Consistent with this letter, RG-383 directs the agency to consider clean fuels in its BACT evaluations. According to RG-383, “[p]ollution prevention is the *most preferred* option for emission reduction because it can become an integral part of a facility’s process.”<sup>45</sup> RG-383 specifically lists “use of low sulfur fuels” as an example of pollution prevention.<sup>46</sup> FOF 264 is inconsistent with the commitment made by the TACB to consider clean fuels as part of PSD BACT analyses, which is incorporated by and a condition of EPA’s approval of Texas’ PSD permitting program.

Though a control option that would fundamentally redefine a proposed source is beyond the scope of BACT, an agency may not exclude consideration of clean fuels from its BACT evaluations as a matter of policy. As the EAB has recently held, the Clean Air Act requires agencies to provide “a reasoned justification, based on an analysis of the underlying administrative record for each permit, to support a conclusion that an option is not ‘available’ in a given case on the grounds that it would fundamentally ‘redefine the source.’”<sup>47</sup> Thus, the TCEQ’s failure to consider clean fuels as part of its BACT analysis was contrary to law and constitutes legal error.

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<sup>44</sup> Letter from Texas Air Control Board, Steve Spaw to Stanley Meiburg, Director of Air Pesticides and Toxics Division of EPA Region 6 regarding Texas Prevention of Significant Deterioration State Implementation Plan (April 17, 1992) at 2 (Attachment D). This letter is incorporated by EPA’s final approval of the Texas PSD permitting program at 57 Fed. Reg. 28098 (June 24, 1992).

<sup>45</sup> ED Ex. 3 at Draft Page 6.

<sup>46</sup> *Id.* at 7.

<sup>47</sup> *In the Matter of Cash Creek Generation, LLC*, Petition Nos. IV-2008-1 & IV-2008-2, slip op. 7-8 (Dec. 15, 2009)(Citing *Desert Rock*, slip op. at 63-72, 76).

#### **iv) Failure to Consider Alternative Production Processes or Innovative Combustion Techniques**

Protestants offered expert testimony and evidence that an alternative production process/fuel combustion technique, integrated combined cycle gasification (IGCC) should be required as a BACT control technology at the White Stallion facility. This evidence was sufficient to show that (i) IGCC would allow for pollution control performance greater than the proposed control train; and: (ii) requiring use of IGCC would not amount to an impermissible redefinition of the White Stallion facility. Nonetheless, the ALJs sustained an objection to this testimony and evidence on grounds that it was irrelevant to this proceeding. This ruling by the ALJs was in error. Protestants properly preserved this error by making an offer of proof concerning this IGCC testimony and evidence on the record.<sup>48</sup>

The definition of BACT incorporated by reference into Texas' PSD rules includes "application of production processes...including...innovative fuel combustion techniques" as methods for controlling pollutant emissions that must be considered as part of the TCEQ's BACT evaluations.<sup>49</sup> As EPA Region 6 informed the TCEQ in a letter concerning White Stallion's application, "when a potential pollution control strategy is not considered in a BACT analysis, the record should provide a reasoned basis to show why that option is not available in a particular instance."<sup>50</sup> Though EPA asked TCEQ to "address any IGCC technology considerations as a part of their BACT analysis and provide a reasoned explanation consistent with the EAB's position to support any decision to eliminate such an option or to exclude it

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<sup>48</sup> Attachment F.

<sup>49</sup> 40 CFR § 52.21(b)(12) incorporated by reference at 30 TAC § 116.160(c)(1)(A).

<sup>50</sup> See Attachments A and C.

altogether from a BACT analysis for this proposed source,”<sup>51</sup> the Commission refused to consider IGCC or to provide a case-specific demonstration that requiring IGCC would amount to an impermissible redefinition of the source.

To the extent that the TCEQ wishes to rely on the Texas Court of Appeals decision in *Blue Skies Alliance v. Texas Commission on Environmental Quality* as support for its decision, as a matter of policy, to exclude alternative generation technologies from the scope of BACT analyses, this reliance is misplaced. As Protestants pointed out in its motions addressing Applicant and ED objections to its IGCC testimony and evidence, *Blue Skies* only supports exclusion of IGCC evidence if there is no evidence that requiring IGCC would not amount to an impermissible redefinition of a proposed source.<sup>52</sup> Here, Protestants provided sufficient evidence to support a finding that requiring IGCC would not constitute an impermissible redefinition of the proposed White Stallion facility, and thus this testimony and evidence should not have been excluded.

The TCEQ’s failure to consider IGCC technology was not based upon any case-specific demonstration borne out by the record before it that requiring IGCC would impermissibly redefine the proposed White Stallion facility. Thus, the TCEQ’s BACT evaluation was inadequate and its determination that IGCC is not BACT for White Stallion is unsupported by substantial evidence. Accordingly FOF Nos. 255, 256, and 259 are in error.

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<sup>51</sup> *Id.* See also *In the Matter of American Power Service Corporation, Southwest Electric Power Company*, Petition Number VI-2008-01, slip op. 10 (Dec. 15, 2009) (Citing *In re: Desert Rock Energy Company*, PSD Appeal Nox. 08-03, 08-04, 08-05 and 08-06, slip op. at 76 (EAB Sep. 24, 2009).

<sup>52</sup> Protestants Sierra Club and No Coal Coalition’s Response to Applicant White Stallion Energy Center and Executive Director’s Objections to Protestants’ Prefiled Testimony and Exhibits at 11-12.

**v) Nitrogen Oxide (NO<sub>x</sub>)**

Selective catalytic reduction (“SCR”) is the proper BACT control for NO<sub>x</sub>. It is a demonstrated, available technology capable of achieving much greater NO<sub>x</sub> reductions than the selective non-catalytic reduction (SNCR) system proposed by Applicant and erroneously endorsed by the Commission. Moreover, testimony by Protestant’s expert witness, Mr. Powers, established that installation and operation of SCR at White Stallion would be economically reasonable. The ED’s permit writer, Mr. Hamilton, considered Mr. Powers’ testimony and found his conclusions reasonable. To reach its conclusion that the BACT limits and technology proposed by Applicant were sufficient, the Commission relied upon a BACT evaluation methodology that is inconsistent with its own BACT Guidance Document, inconsistent with the definition of BACT incorporated by reference in Texas’ SIP-approved PSD program, and inconsistent with fundamental principles of BACT articulated by the EPA and endorsed by the Commission.

FOF 278 is in error. While the ED did investigate the use of hot-side SCR, the ED’s permit writer admitted that he did not consider the use of tail-end SCR as part of his BACT evaluation. Protestants’ expert Mr. Powers presented testimony that tail-end SCR is an available technology that offers greater NO<sub>x</sub> control than the SNCR system proposed by the Applicant. Mr. Powers also offered testimony that tail-end SCR is an economically reasonable option that avoids potential technical problems associated with the use of hot-side SCR on a pet-coke CFB boiler facility.

FOF 279 is in error, because the development of SCR units that can be used to control NO<sub>x</sub> emissions from pet coke-fired CFB boilers like the proposed White Stallion facility are a

recent technical development for purposes of Tier I BACT analyses. The fact that SCR, in one form or another, has existed for decades does not relieve the TCEQ of its obligation to consider its application as a control technology that allows for greater control performance than proposed by the Applicant.

FOF 283 is in error. High-dust SCR on a CFB is commercially available. In fact, a major catalyst vendor indicated that it would likely be willing to guarantee the performance of a hot-side SCR at the White Stallion facility.

FOF 286 is in error. Mr. Powers and Mr. Hamilton both testified that there is no real question but that tail-end SCR is technically feasible. Applicant failed to offer substantial evidence rebutting this testimony. Mr. Powers also presented evidence demonstrating that tail-end SCR is economically reasonable. Mr. Hamilton found Mr. Powers' testimony reasonable and the Applicant did not present substantial evidence demonstrating that tail-end SCR is not economically reasonable. Furthermore, the Commission failed to take into account the reduced cost of increased CO and VOC control associated with the use of tail-end SCR. A thermal oxidation unit may piggyback with a tail-end SCR at a negligible cost allowing for significant increases in CO and VOC emission control. These co-benefits should have been considered in the Commission's and Applicant's consideration of the potential costs of tail-end SCR.

FOF 288 is in error, because the conclusory testimony of Applicant's witness that some amount of calcium oxide remaining in the flue gas after it has passed through the baghouse would pose a risk of catalyst poisoning is not sufficient to support this finding in the face of testimony by Mr. Powers and Mr. Hamilton that tail-end SCR is technically feasible.

COL 47 is in error because lower NO<sub>x</sub> limits based upon tail-end SCR are BACT for the White Stallion facility.

On January 8, 2010, Protestants requested a Commission to depose a corporate representative of Haldor Topsoe on the issue NO<sub>x</sub> control technologies.<sup>53</sup> The ALJs denied this request without explanation.<sup>54</sup> At the hearing on the merits, Protestants' counsel asked the ALJs to provide a basis for their denial.<sup>55</sup> After considering the matter, the ALJs refused to provide a basis for their denial.<sup>56</sup> Protestants objected to ALJs denial and to their failure to provide a basis for the denial.<sup>57</sup> Because, the denial was without any basis and because Protestants were deprived an opportunity to explore representations made by a Haldor Topsoe representative to the Applicant regarding the feasibility and availability of SCR to control NO<sub>x</sub> emissions from the White Stallion facility, the ALJs committed harmful error. Though there is no specific FOF or COL in the White Stallion order addressing Protestants' request, Protestants hereby preserve this issue for appeal.

**vi) Sulfur Dioxide (SO<sub>2</sub>)**

The TCEQ's SO<sub>2</sub> BACT determination is in error for three reasons: (i) the TCEQ failed to require wet scrubbing to control SO<sub>2</sub> emissions from the WESC; (ii) even if dry scrubbing is the proper SO<sub>2</sub> control technology, more stringent limits should have been required; and (iii) the TCEQ failed to require WSEC to consider use of clean fuels to control SO<sub>2</sub> emissions.<sup>58</sup>

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<sup>53</sup> Attachment G.

<sup>54</sup> SOAH Order 12.

<sup>55</sup> 1 Tr. 63:9-65:19.

<sup>56</sup> 1 Tr. 155:21-156:5

<sup>57</sup> *Id.*

<sup>58</sup> Thus, FOF Nos. 290 and 291 is in error.

FOF 292 is in error. First, as explained above, if more stringent SO<sub>2</sub> BACT limits are achievable (taking into account collateral impacts) using wet scrubbing, BACT limits must be established based on use of a wet scrubber, regardless of when wet scrubbing technology was developed. The claim that wet scrubbing is not technically practicable on a CFB is unsupported by substantial evidence. The claim that wet scrubbing is not economically reasonable is also unsupported by substantial evidence. Neither the Applicant nor the ED submitted a cost analysis for wet scrubbing at WSEC. Mr. Powers is the only expert who performed a cost effectiveness calculation for wet scrubbing at WSEC and found that wet scrubbing would cost approximately \$1,560/ton. This cost is well within the cost effectiveness level that EPA considers reasonable in attainment areas.

FOF 293, even if true, does not support a finding that the SO<sub>2</sub> limits in White Stallion's permit reflect BACT. If other CFB facilities are permitted with lower SO<sub>2</sub> emission rates because they burn fuel with a lower sulfur concentration than the fuel that will be burned at WSEC, WSEC was required to consider alternative fuels with lower sulfur as part of its BACT analysis. Because alternative fuels were not considered, White Stallion's failed to prove that its SO<sub>2</sub> limits satisfy BACT.

#### **vii) Carbon Monoxide and Volatile Organic Compounds**

FOF Nos. 315, 317, and 319 are in error, because an oxidation catalyst is a CO control technology that is available and capable of achieving reductions in emissions of CO beyond those required by the White Stallion permit. The ED's witness, Mr. Hamilton, did testify that an oxidation catalyst is not technically practicable, because the catalyst would be poisoned by the fly ash and sulfur in the fuels proposed by White Stallion. However, Mr. Hamilton did not

consider a scenario where the oxidation catalyst would piggyback on a tail-end SCR. When an oxidation catalyst is placed in the housing of a tail-end SCR, catalyst poisoning is no longer a problem. Because tail-end SCR is the proper BACT control for NO<sub>x</sub>, an oxidation catalyst should be required as the BACT control for CO and VOC.<sup>59</sup>

FOF 321 is in error, because tail-end SCR is the proper BACT control technology for White Stallion. If tail-end SCR is used, an oxidation catalyst can be placed in the housing of the SCR at a relatively low cost. An oxidation catalyst is technically practicable and economically reasonable.

Insofar as the TCEQ relies upon FOF 320 to support its decision that an oxidation catalyst is not a required BACT control, it is in error. If lower limits are achievable (in light of collateral impacts) using a technology other than that proposed by an applicant, that alternative technology must be required regardless of when it was developed.

**viii) Total Particulate Matter and PM<sub>2.5</sub>**

In their Proposal for Decision in this matter, the ALJs found that 0.016 lb/MMBtu is BACT for Total PM and PM<sub>2.5</sub>.<sup>60</sup> However, the Commission did not accept this recommended limit and issued a final permit to White Stallion setting a limit of 0.025 lb/MMBtu as BACT for total PM and PM<sub>2.5</sub>. The TCEQ's White Stallion Order contains a section entitled, "Explanation of Changes."<sup>61</sup> This section indicates that the Commission adopted the ALJs' Proposed Order granting White Stallion's application with certain changes, including changes to the ALJs'

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<sup>59</sup> Thus, FOF 322 is in error.

<sup>60</sup> PFD at 74.

<sup>61</sup> White Stallion Order at 65.

findings of fact regarding BACT limits for total PM and PM<sub>2.5</sub>.<sup>62</sup> Texas Gov't Code § 2003.047(m) grants the TCEQ authority to amend an ALJ's proposal for decision, including any finding of fact, but requires all such amendments to be accompanied by an explanation of the basis of the amendment. The Commission does not provide the requisite explanation of the basis of the amendment, nor does it provide any basis for its conclusion that 0.025 lb/MMBtu is the proper BACT limit for total PM and PM<sub>2.5</sub>. Therefore, FOF Nos. 303 and 304 are unsupported by substantial evidence, and are in error.

### **ix) Monitoring**

The Maximum Allowable Emission Rate Table (MAERT) in White Stallion's permit contains BACT/MACT based one-hour filterable PM limits. These limits are not practically enforceable. A PSD permit must include conditions and limitations that are practically enforceable.<sup>63</sup> This means that permit limits must allow an enforcement authority to show continual compliance (or non-compliance) such as adequate testing, monitoring, and record

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<sup>62</sup> *Id.*

<sup>63</sup> *In re Steel Dynamics*, 9 E.A.D. 165, 231 n72 (EAB 2000) (“[W]e generally agree that permit emissions limits must be enforceable...”); *In re Genesee Power Station*, 4 E.A.D. 832, 856-58 (EAB 1993) (“On remand, [MDNR] must consider whether fuel cleaning in combination with the add-on controls already in the permit is BACT for controlling lead emissions. The fuel cleaning alternatives considered by MDNR must at least include options that would make Genesee ultimately responsible for ensuring that, to the extent feasible, wood coated or treated with lead-bearing substances is not burned at the facility. In addition, these options must include some means of determining Genesee's compliance with them.”); *In Re Conocophillips Co.*, 13 E.A.D. 768, 796 (EAB 2008) (“Turning, then, to the issue of the enforceability of the BACT requirements, the NSR Manual provides that a PSD permit must, among other things, provide for adequate reporting and recordkeeping so that the permitting agency can determine the compliance status of the source. NSR Manual at B.56; Petition at 21; see also *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 394 n.54 (EAB 2007) (“In addition to requiring conditions and limitations [that are] directly enforceable by regulators at both the federal and the state level (*see* 40 C.F.R. § 52.21(b)(17)), the term “federal enforceability” has been interpreted as requiring practical enforceability as well. That is, the permit must include conditions allowing the applicable enforcement authority to show continual compliance (or non-compliance) such as adequate testing, monitoring, and record keeping requirements.”)(citing, e.g., NSR Manual at A.5-.6). IEPA does not dispute that the flare minimization conditions must be practically enforceable and met on a continuous basis, and in fact asserts that they are.”).

keeping requirements.<sup>64</sup> As noted in RG-383, the enforceability of BACT limits is an important part of the BACT analysis:

Consistent with 30 TAC Section 116.111(a)(2)(B) and (G), the applicant must propose a performance demonstration to ensure that the emission reduction proposal will perform as represented on an ongoing basis. Without a method to demonstrate that the proposed facility will achieve the performance represented in the BACT proposal, an emission reduction proposal may not be enforceable and may not be acceptable. Include the agreed-upon performance demonstration method in a permit condition to ensure the BACT performance levels will be achieved on an ongoing basis.<sup>65</sup>

FOF No. 373 and COL Nos. 32-38, and 69 are in error, because periodic stack sampling, bag break detector, and continuous opacity monitoring (COMS) are insufficient to insure ongoing compliance with 1-hour filterable PM limits. Even if FOF No. 375 is not in error, it does not support the Commission's finding that monitoring is sufficient to ensure ongoing compliance with 1-hour filterable PM limits. COMS do not directly measure PM emissions. An opacity violation detected by COMS does not necessarily indicate a PM limit has been violated. If COMS readings indicate that opacity limits are regularly being violated it may, but need not, order stack testing to determine whether filterable PM limits are also being violated. In such cases, it is the stack testing and not the COMS readings that establish compliance or non-compliance with PM limits.

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<sup>64</sup> *In Re Conocophillips Co.*, 13 E.A.D. 768, 796 (EAB 2008); *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 394 n.54 (EAB 2007).

<sup>65</sup> ED Ex. 3 at 13

A bag break detector is also insufficient to establish ongoing compliance with 1-hour filterable PM limits. A pressure drop identified by the bag break detector does not indicate compliance or noncompliance with PM limits at the time of the malfunction. If a bag break detector detects a pressure drop, the Commission may, but need not, require White Stallion to conduct stack testing to establish compliance with PM limits. Thus, it cannot be said that a bag break detector is sufficient to establish ongoing compliance with 1-hour filterable PM limits.

Annual stack testing is also an inadequate method for determining ongoing compliance with 1-hour filterable PM limit. Additional stack testing beyond the required annual tests would be required to determine whether high opacity emissions measured by COMS or a pressure drop registered by the bag tear detector are indicative of PM violations. Moreover, a finding that annual stack testing is sufficient to determine ongoing compliance with the White Stallion 1-hour filterable PM limit is inconsistent with FOF No. 272, which states “[t]he results of isolated stack tests conducted on emissions at other plants do not establish emission levels achieved during all scenarios, and therefore should not be used to set BACT-based limits at WSEC.” If this is the case, then annual stack-testing is unreliable to determine ongoing compliance with White Stallion’s 1-hour filterable PM limit across all operating scenarios. Finally, even if annual stack-tests are taken to be a reliable indication of a facility’s typical performance, it does not follow that deviations from typical performance do not occasionally occur. In order to ensure continual compliance with 1-hour filterable PM limits, monitoring sufficient to establish compliance with these limits should be required when it is technically feasible.

Stack testing has been an acceptable method for determining compliance with short-term filterable PM limits until recently, because there was no technically demonstrated alternative. Today, however, PM Continuous Emissions Monitoring systems (“PM CEMS”) are technically

demonstrated and commercially available.<sup>66</sup> PM CEMS is the only monitoring method that allows for direct, continuous monitoring of a facility's filterable PM emissions. In Texas, PM CEMS is currently being used to determine compliance with filterable PM limits at the Sandow (units 5A and 5B), and Oak Grove (Unit 1 and 2) facilities. Thus, it cannot be said that past TCEQ decisions support a policy determination that PM CEMS is not a technically viable method for monitoring filterable PM emissions.

The very definition of "emission limitation" in the Clean Air Act states that the term includes "any requirement relating to the operation or maintenance of a source to assure continuous emission reduction."<sup>67</sup> Thus, by definition the enforceability of emission limitations is integral to the limit setting process. According to 30 TAC § 116.111(a), no permit may issue if an application fails to include information demonstrating that emissions from the facility will satisfy (among other requirements) BACT and MACT.<sup>68</sup> This same rule also requires an application to include provisions for measuring the emission of significant air contaminants and a demonstration that the proposed facility will achieve the performance specified in the permit application.<sup>69</sup> A filterable PM limit that is not practically enforceable fails to require maximum achievable reductions (in light of permissible considerations) and therefore is neither BACT nor MACT.

The claim that the enforceability of limits is an integral part of BACT is also consistent with EPA's Draft NSR Manual, which serves as the basis for BACT reviews conducted by EPA and many states. According to the NSR Manual, "[t]o complete the BACT process, the reviewing agency must establish an *enforceable* limit for each subject emission unit at the

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<sup>66</sup> See Attachments A-C.

<sup>67</sup> 42 U.S.C. § 7602(k).

<sup>68</sup> 30 TAC §§ 116.111(a)(2)(C) and (F).

<sup>69</sup> 30 TAC §§ 116.111(a)(2)(B) and (G).

source....”<sup>70</sup> These limits “must be met on a continual basis at all levels of operation...and be enforceable as a practical matter.”<sup>71</sup> While EPA has not required Texas to follow the “top-down” approach to BACT outlined in the NSR Manual, Texas’ PSD program was approved based upon a finding that its 3-Tiered approach to BACT results in permit limits that are as stringent as those established through a top-down review. A permit limit that is not practically enforceable is less stringent than a limit that is practically enforceable. Accordingly, in order to ensure that permit limits established pursuant to a 3-Tier BACT analysis are sufficiently stringent, reasonable steps should be taken to ensure that Texas permit limits are practically enforceable. Because PM CEMS is the only method available to ensure ongoing compliance with White Stallion’s 1-hour filterable PM limit, and because no party has articulated a credible reason why PM CEMS should not be required, the Commission erred in finding that PM CEMS is not required.

### **G. Maximum Achievable Control Technology (MACT)**

MACT case-by-case requirements are among the strictest in the federal Clean Air Act. MACT case-by-case limits must be established that are no less stringent than emission control which is achieved in practice by the best controlled similar source regardless of cost.<sup>72</sup> The term “similar source” must be defined broadly to include all units with comparable emissions that can be controlled using the same control technology.<sup>73</sup> MACT limits must be even more stringent than the emission control achieved in practice by the best performing similar source if further reductions are achievable, taking into consideration the cost of achieving further reduction and

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<sup>70</sup> ED Ex. 4 at B.56.

<sup>71</sup> *Id.*

<sup>72</sup> 40 CFR § 63.41; 30 TAC § 116.15; *Nat’l Lime Ass’n v. EPA*, 233 F.3d 625, 640 (D.C. Cir. 2000) (“[C]ost may not influence the determination of a MACT floor, which depends exclusively upon the emission reductions achieved by the best-performing similar sources.”).

<sup>73</sup> 40 CFR § 63.41; 61 Fed. Reg. 68,384, at 68, 394-95 (Dec. 27, 1996); *Nat’l Lime*, 233 F.3d at 634.

any non-air quality health and environmental impacts.<sup>74</sup> MACT case-by-case analyses must take account of the full range of methods available for reducing the emission of hazardous air pollutants (HAPs).<sup>75</sup> Furthermore, limits must be established for each HAP the plant will emit. Reliance on HAP surrogates is only proper if the three part test articulated in *National Lime* is satisfied.<sup>76</sup>

Applicant has failed to satisfy each of these MACT requirements, and a proper case-by-case MACT analysis was not performed by the TCEQ. Therefore, the Application was deficient and White Stallion's permit was issued in error.

FOF 351, and 353-378 are in error, because White Stallion's MACT analysis did not sufficiently justify: (i) its use of surrogates; (ii) its overly-narrow construction of the term "similar source" for purposes of its MACT floor evaluation; (iii) its failure to consider stack testing and performance data as part of its evaluation of its MACT floor and beyond-the-floor evaluations; and (iv) its failure to propose lower limits consistent with levels either achieved by, or limits approved in permits for similar sources.

FOF 357 is in error, because White Stallion failed to demonstrate that its proposed surrogates were proper.

#### **H. Plantwide Applicability Limit (PAL) Permit**

Special Condition No. 39 of the Draft Permit is a Plantwide Applicability Limit (PAL). The PAL is the sum of allowable emissions in the Maximum Allowable Emission Rate Table (MAERT), and allows White Stallion to avoid federal new source review preconstruction

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<sup>74</sup> 40 CFR § 63.41.

<sup>75</sup> *Nat'l Lime*, 233 F.3d at 634.

<sup>76</sup> *Id.* at 639; *Sierra Club v. EPA*, 353 F.3d 976, 984 (D.C. Cir. 2004); *Mossville Environmental Action Now v. EPA*, 370 F.3d 1232, 1242-43 (D.C. Cir. 2004).

requirements that might otherwise be required for future modifications, so long as the modifications do not cause plant emissions to exceed the PAL limits.

The EPA has expressly disapproved Texas' PAL program, because it is inconsistent with federal law.<sup>77</sup> In its disapproval, EPA specifically noted that Texas' PAL rules are inconsistent with federal law insofar as these rules "lack[] a provision which limits applicability of a PAL only to an *existing* major stationary source."<sup>78</sup> The White Stallion Energy Center is a proposed new stationary source, and thus TCEQ's issuance of White Stallion's PAL permit is inconsistent with the Texas SIP and federal law.<sup>79</sup> Thus, Special Condition 39 should be excised from White Stallion's permit.

Therefore, even if FOF of 33 is not in error, the PAL authorization was in error. FOF 376 is in error, because EPA has expressly found that TCEQ's PAL rules are inconsistent with the requirements of the Federal Clean Air Act and the requirements of the Texas SIP. For these reasons, EPA disapproved TCEQ's proposed amendment to include its PAL rules as part of the Texas SIP. COL Nos. 74 and 78 are also in error, because PAL authorizations are not proper for new major sources, like the White Stallion facility.

## **I. Carbon Dioxide (CO<sub>2</sub>)**

Protestants offered testimony and exhibits regarding CO<sub>2</sub> and greenhouse gases. In response to objections from the ED and Applicant, this evidence was stricken by the ALJs on relevance grounds. Protestants made a formal offer of proof and preserved this ruling for

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<sup>77</sup> 75 Fed. Reg. 56424, 56438 (September 15, 2010); *see also* 74 Fed. Reg. 48467, 48469, 48474 (September 23, 2009).

<sup>78</sup> 75 Fed. Reg. 56438; *see also* 74 Fed. Reg. 48474.

<sup>79</sup> *See* Attachments A-C.

appeal.<sup>80</sup> As explained below, the ALJs erred in excluding Protestants evidence, because it is relevant.

On December 15, 2009, the EPA announced a finding that greenhouse gases including CO<sub>2</sub> endanger public health and welfare.<sup>81</sup> In this finding, the EPA formally acknowledges that emissions of greenhouse gases, including CO<sub>2</sub>, “endanger both the public health and public welfare of current and future generations” and that the “risk and the severity of adverse impacts on public welfare are expected to increase over time.”<sup>82</sup> EPA’s endangerment finding confirms that CO<sub>2</sub> and other greenhouse gasses must be regulated under the federal Clean Air Act. Under the Texas Clean Air Act, the applicant must demonstrate that the emissions from a facility will not endanger the public’s health.<sup>83</sup> This requirement of Texas law cannot be met without an analysis of White Stallion’s CO<sub>2</sub> emissions and their potential impacts on human health and the environment. Thus, the Commission’s failure to consider CO<sub>2</sub> emissions from the White Stallion facility is error. FOF Nos. 32, 131, 248.and COL Nos. 5, 48, and 76-77 are in error.

### **III. CONCLUSION**

**WHEREFORE**, Protestants respectfully request that this motion for rehearing be granted and that the Application be denied.

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<sup>80</sup> See Attachment F.

<sup>81</sup> 74 Fed. Reg. 66,496 (Dec. 15, 2009).

<sup>82</sup> *Id.*

<sup>83</sup> Tex. Health & Safety Code § 382.0518(b).

Respectfully Submitted,

**ENVIRONMENTAL INTEGRITY PROJECT**

By:



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Gabriel Clark-Leach  
Texas Bar No. 24069516  
Ilan Levin  
Texas Bar No. 00798328  
1303 San Antonio Street, Suite 200  
Austin, Texas 78701  
Phone: 512-637-9477  
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# **ATTACHMENT A**





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

September 29, 2010

Mr. Mark Vickery, P.G.  
Executive Director  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087

Re: White Stallion Energy Center, PSD-TX-1160, PAL 26, and HAP 28, Matagorda County, Texas.

Dear Mr. Vickery,

The Environmental Protection Agency (EPA) has strong concerns about the public health and environmental impacts of the planned White Stallion Energy Center, based on a review of the proposed air quality permits. EPA previously wrote to TCEQ on several occasions about this matter, including on April 14, 2009, April 20, 2009, and February 10, 2010. Some of EPA's concerns included, but were not limited to the following summary:

- EPA expressed concerns about the lack of a proper demonstration that the proposed facility will not cause or contribute to violations of the National Ambient Air Quality Standard (NAAQS) for ozone, and requested that the applicant generate a modeling protocol and provide a copy to EPA for review. EPA indicated that it might be compelled to consider available Clean Air Act enforcement authorities or objecting to the subsequent Title V permit if an appropriate ozone analysis was not conducted. (April 14, 2009 - Item #5; February 10, 2010 - Item #1).
- EPA indicated that there were problems with the issuance of a federal plant-wide applicability limit (PAL) to the facility. (February 10, 2010 - Item #2).
- EPA asked for the record to support the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub>. (February 10, 2010 - Item #3).
- EPA asked the TCEQ and applicant to specifically address and provide a rationale that considered IGCC and clean fuels options in the determination of Best Available Control Technology (BACT) emissions limitations. (February 10, 2010 - Items #4 and #5).

- EPA provided information for case-by-case MACT determinations regarding the use of wet FGD and fabric filters to control certain HAP emissions at a similar facility. (April 20, 2009 - Items #1 and #2).

In addition, EPA has finalized new NAAQS standards, and federal law, the Texas SIP, and PSD regulations require that emissions from construction or operation of a permitted facility will not cause, or contribute to, a violation of any NAAQS:

- EPA proposed a revision to the NAAQS for nitrogen dioxide (NO<sub>2</sub>) on July 15, 2009 (74 FR 34404), finalized the standard on February 9, 2010 (75 FR 6474), and the standard became effective on April 12, 2010.
- EPA proposed a revision to the NAAQS for sulfur dioxide (SO<sub>2</sub>) on December 8, 2009 (74 FR 64810), finalized the standard on June 22, 2010 (75 FR 35520), and the standard became effective on August 23, 2010.

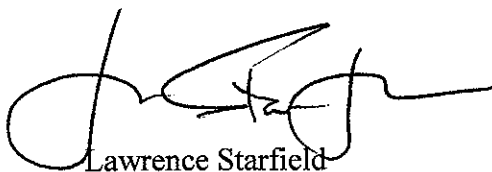
The TCEQ should transmit for review to EPA a copy of an amended permit application or other records which contain demonstrations that the proposed facility will not contribute to NO<sub>2</sub> and SO<sub>2</sub> NAAQS violations, and provide notice to EPA of TCEQ's action related to the consideration of such information. Neither EPA nor the public have had their rights under the Clean Air Act to review the demonstrations of compliance for these standards.

Because of the deficiencies identified in our written correspondence and the lack of required NAAQS demonstrations, if TCEQ were to issue the permits as they are proposed they would not be consistent with federal requirements and the Agency might have to consider available Clean Air Act authorities under Sections 113 and 167, and/or object to the subsequent Title V permit.

EPA is requesting that TCEQ withhold action on this permit application for the next 90 days, so that TCEQ and EPA can discuss the permit record. In addition, I would propose that we have TCEQ and applicant staff communicate closely with their EPA counterparts on the technical demonstrations needed to show that this facility will not adversely impact public health and will in fact protect the National Ambient Air Quality Standards.

Please contact me at (214) 665-2100, or Carl Edlund of my staff at (214) 665-7200, if you should have any questions concerning this matter.

Sincerely yours,



Lawrence Starfield  
Deputy Regional Administrator

Enclosures

cc: TCEQ Commissioners  
Richard Hyde, TCEQ  
Les Trobman, TCEQ



# **ATTACHMENT B**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

APR 14 2009

Office of the Chief Clerk (MC-105)  
Texas Commission on  
Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087

RE: Prevention of Significant Deterioration (PSD) Draft Permit, White Stallion Energy Center, PSD-TX-1160, HAP28, and PAL26, Matagorda County, Texas

To Whom It May Concern:

We have reviewed the draft Prevention of Significant Deterioration (PSD) permit for the White Stallion Energy Center located in Matagorda County, Texas. We received it in our office on March 13, 2009. The draft permit was evaluated to ensure consistency with the Texas PSD State Implementation Plan (SIP) and Federal Clean Air Act requirements. Our comments on the permit are enclosed.

We look forward to working with the Texas Commission on Environmental Quality (TCEQ) to address the issues identified in our comments and to ensure that the final permit is consistent with the requirements of the Texas PSD SIP. This letter is not a final position by the U.S. Environmental Protection Agency (EPA) concerning the disposition of the application and draft permit. Please contact me at (214) 665-7250, or Stephanie Kordzi of my staff at (214) 665-7520, if you have questions. Thank you for your cooperation.

Sincerely yours,

A handwritten signature in black ink that reads "Jeff Robinson".

Jeff Robinson  
Chief  
Air Permits Section

Enclosures

cc: Mr. Randy Hamilton  
Texas Commission on Environmental Quality

Mr. Steve Hagle  
Texas Commission on Environmental Quality

## ENCLOSURE

### Permit

1. Page 18, Permit Condition 32 - We recommend that TCEQ consider requiring particulate matter (PM) Continuous Emission Monitoring Systems (CEMS) to monitor filterable PM. PM CEMS was mentioned in the Preliminary Determination Summary (See Comment Number 4 below). PM CEMS measures the pollutant of interest, which periodic performance testing also measures, but it provides a greater degree of confidence that the PM control device is operating as intended. We believe PM CEMS for filterable particulate matter have been adequately demonstrated, and we are aware of a number of successful applications in industries such as pulp and paper, hazardous waste incineration, copper smelting, and no fewer than six electric generating units. We are aware of additional plans for installation of PM CEMS on electrical generating units. The capital and operating costs of PM CEMS are comparable to those of Continuous Opacity Monitoring Systems (COMS). Also, we note that revisions to the New Source Performance Standards for electric utility boilers allow PM CEMS to be used in lieu of opacity limits and COMS. Direct, continuous measurement of the pollutant of concern, as can be provided only by PM CEMS, will help ensure proper monitoring of the PM control equipment to the source, the environmental agency, and the public.
2. Page 20, Permit Condition 39.C. – The permit condition states that compliance with the Plantwide Applicability Limit (PAL) will be demonstrated by using CEMS. However, CEMS are not required for PM monitoring. Please reconcile.
3. Page 20, Permit Condition 39.D. – The permit states that the PAL is subject to the requirements of 30 Texas Administrative Code (TAC) Chapter 116, Subchapter C. However, EPA is currently reviewing these state regulations and has not yet taken action to approve or disapprove these regulations into the Texas State Implementation Plan (SIP). Accordingly, Texas must demonstrate that all emissions units at this source continue to meet all requirements of the currently approved SIP, including the requirements of any existing permits issued under the approved SIP. If any requirement of an existing permit is changed, the record for this permit action must demonstrate that such change meets the applicable SIP approved requirements in 30 TAC section 116.116. In addition, we strongly encourage TCEQ to ensure that all facets of EPA's PAL provisions are adequately addressed by this permit. (Please see *Federal Register (FR)*, 67 FR 80186, December 31, 2002.)

### Preliminary Determination Summary

4. Page 9, BACT for Emissions during Startup/Shutdown – Please have the permittee forward a final copy of the final Startup/Shutdown written plan, when prepared.

5. Page 13, Section VII, Ozone Analysis – The EPA is concerned about the TCEQ guidance referenced by the applicant in the Modeling Report that was submitted to TCEQ regarding assessing the ozone impacts from the proposed unit in its PSD permit application. Specifically, it was determined that the location is ozone neutral. If the TCEQ guidance that was used is based on the Scheffe Point Source Screening Tables, then EPA has commented and provided information to TCEQ on the inaccuracy of using Scheffe Point Source Screening Tables for determining ozone ambient impacts in previous permit comment letters. While Scheffe tables have been previously used in PSD permit applications to assess ozone impacts in the absence of other accepted techniques, use of the Scheffe Point Source Screening Tables or similar screening processes are not EPA-approved PSD modeling protocols.<sup>1</sup> TCEQ Air Quality Modeling Guidelines establish a process by which the permit applicant communicates with TCEQ staff and develops a modeling protocol that will be followed. We could not see where a modeling protocol was developed or submitted by White Stallion. Please forward it to our office if it was prepared. The TCEQ has numerous nitrogen oxide control strategies throughout East Texas and in the Houston-Galveston-Brazoria (HGB) area to reduce ozone levels, but the comment that the proposed source, considering its proposed location, is ozone neutral is in direct conflict with control strategies developed to reduce ozone in the nearby HGB Nonattainment Area. EPA Region 6 will consider available Clean Air Act enforcement authorities or objecting to the subsequent Title V permit for this facility if an appropriate ozone analysis is not conducted for this facility. In addition, since this facility is proposed immediately outside the HGB non-attainment area, please provide EPA appropriate air quality modeling for ozone impacts that clearly demonstrates what the project's impact will be at specific monitors in the HGB area and that the construction of the facility will not significantly impact ozone levels at the HGB area. At this point, the only modeling technique that would seem technically appropriate for this source would be a CAMx based analysis using available modeling databases. We look forward to working together with the source in developing a modeling protocol for the ozone analysis. Please remember that EPA does not have an established significant impact level for ozone and TCEQ should not assume that the threshold for PSD purposes is an impact of 2.0 parts per billion or more.

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<sup>1</sup> We have enclosed the Richard Scheffe letter on the Scheffe Point Source Screening Tables for TCEQ and the source's reference



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

JUL 28 2006

Rec'd  
BP - AR  
AUG - 3 2006

Dial \_\_\_\_\_  
Staff \_\_\_\_\_

Ms. Abigail Dillen  
209 South Willson Avenue  
Bozeman, Montana 59715

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

Dear Ms. Dillen:

This letter is in response to your inquiry regarding applicability of the Scheffe Point Source Screening Tables.

I developed the screening tables in 1988 as a screening test to estimate the contribution to ambient ozone associated with increased non-methane organic carbon (NMOC) emissions arising from new or modified point sources. The tables never achieved a level of EPA certification associated with EPA guideline models and consequently were not endorsed by the Agency. After publication (non peer reviewed literature) of the tables in 1989, the American Petroleum Institute enlisted renowned atmospheric modeling experts, Drs. John Seinfeld and Panos Georgopoulos of the California Institute of Technology, to review the technique. Based on their input and our own analysis, the EPA decided at that time that the tables did not adhere to an adequate level of scientific credibility to be recommended for their intended purpose.

Ozone science has advanced markedly since 1988 with substantial improvements in the characterization of emissions, meteorological, and atmospheric chemistry processes, paralleling an equivalent improvement in computational processing capability, all of which constitute the principal features of a modeling framework. As a result, the Scheffe method, which was deemed "not adequate" in 1989, would be even less adequate today.

Please do not hesitate to contact me (919-477-7955) regarding any further questions.

Sincerely,

Richard D. Scheffe, PhD  
Senior Science Advisor  
OAQPS, EPA

cc: Richard Long, Region 8  
Tom Curran  
Valerie Broadwell



# **ATTACHMENT C**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

FEB 10 2010

Mr. Richard Hyde, P.E.  
Deputy Director  
Office of Permitting and Registration  
Texas Commission on  
Environmental Quality  
P.O. Box 13087  
Austin, TX 78711-3087

Re: White Stallion Energy Center, PSD Permit Nos. PSD-TX-1160, PAL 26, and HAP 28,  
Matagorda County, Texas

Dear Mr. Hyde:

Enclosed is the U.S. Environmental Protection Agency (EPA) analysis of the above-referenced permit actions. We performed this analysis in light of the recent issuance of the Texas Commission on Environmental Quality (TCEQ) Response to Comments (RTC) regarding this matter on October 2, 2009, and the upcoming "Hearing on the merits", scheduled to begin on February 10, 2010. Our comments focus on aspects of the permit actions that appear to be inconsistent with the requirements of the federal Clean Air Act and the implementing regulations, including the federally-approved Texas State Implementation Plan (SIP).

If the issues detailed in this letter are not appropriately responded to by TCEQ prior to final resolution of this permitting action, EPA may consider using Clean Air Act authorities to object to the subsequent Title V operating permit for this facility, or other remedies under the statute. Please contact me at (214) 665-7200, or Jeff Robinson of my staff at (214) 665-6435, if you should have any questions concerning this matter.

Sincerely yours,

A handwritten signature in black ink, appearing to read "C. Edlund", written over a white background.

Carl E. Edlund, P.E.  
Director  
Multimedia Planning  
and Permitting Division

Enclosure

cc: TCEQ Commissioners  
Mark Vickery, TCEQ Executive Director  
Steve Hagle, TCEQ

## ENCLOSURE

### **I. Air Quality Impacts Analysis**

We commented on the draft permit for the proposed White Stallion facility on April 14, 2009. In the Executive Director's response to comments (RTC), the TCEQ disagreed with our comments that photochemical modeling for ozone was needed to demonstrate that the proposed source would cause or contribute to violation of the National Ambient Air Quality Standards (NAAQS). TCEQ also disagreed with our comment that the ozone analysis performed by the applicant was in direct conflict with NO<sub>x</sub> control strategies developed to reduce ozone in the nearby Houston, Galveston, Brazoria (HGB) non-attainment area. TCEQ indicated if an evaluation of ozone impacts on a non-attainment area is needed, that the non-attainment SIP process is best suited for such an evaluation. As you are aware, 40 CFR § 51.165 and 51.166 requires permitting authorities to demonstrate that the proposed source will not cause or contribute to violation of the ozone NAAQS per 40 CFR 52.21(k). However, since this facility is proposed immediately outside the HGB non-attainment area, we continue to believe that appropriate air quality modeling must be conducted to clearly demonstrate that the project will not negatively impact ozone concentrations at specific monitors in the HGB area.

The TCEQ also stated in its RTC that EPA has no preferred model to determine impacts from a single source; no requirement for photochemical modeling; and no requirement for applicant to conduct regional ozone analysis. Our PSD regulations at 40 CFR § 51 Appendix W 5.2.1 recommend models for evaluating ozone impacts. Specifically, control agencies with jurisdiction over areas with ozone problems are encouraged to use photochemical grid models such as Models-3/Community Multi-scale Air Quality (CMAQ) modeling system to evaluate the relationship between precursor species and ozone. In our April 14, 2009 comment letter to TCEQ on the draft permit we also discussed potentially using a CAMx based analysis, since TCEQ has multiple episode databases that evaluate ozone levels in the Houston area. Appendix W 5.2.1 also recommends that permitting authorities consult with EPA on estimating the impacts of individual sources to determine the most suitable approach for estimating ozone impacts on a case-by-case basis. In an effort to determine that the proposed source will not cause or contribute to an air pollution in violation of ozone NAAQS standard, we have offered to work on a modeling protocol with TCEQ for this facility. To date, neither TCEQ nor the applicant have elected to consult with us on use of a modeling protocol that would estimate potential ozone impacts from the proposed source despite EPA's direct comment to TCEQ on this matter.

In addition, the TCEQ RTC expressed concern that the scope of the modeling and associated review required for multiple episodes and monitors (and potential control scenarios for any monitors currently above the ozone standard) would be costly, take up to a year to complete, and still not provide information to definitively address EPA's concerns, since the EPA does not have an established significant impact level (SIL) for ozone. Other permit applicants and permitting authorities in Region 6 (including TCEQ) have worked with us to conduct photochemical modeling to demonstrate that a proposed source would not cause or contribute to a violation of the ozone NAAQS. These projects have typically only taken a few months to

conduct and the cost, when a contractor has been used, is minimal with most analyses costing less than the other criteria pollutant modeling.

TCEQ also stated that EPA does not have a requirement for photochemical modeling of SIP attainment demonstration modeling techniques for NSR permitting purposes for sources of VOC or NO<sub>x</sub> within 100 and 200 kilometers, respectively of these precursors outside a non-attainment area. However, the TCEQ has developed multiple ozone SIPs where sources of NO<sub>x</sub>, that were at least 100-200 km outside the non-attainment areas, have been controlled to yield ozone decreases in the non-attainment areas (DFW and HGB SIPs in 2000/2001, DFW SIP 2007). TCEQ also commented that winds would not transport the proposed source's emissions to the HGB nonattainment area, but considering the proximity of the source to the HGB area, we are concerned because previous modeling episodes have had multiple days with winds from the west that could transport emissions towards the HGB nonattainment area.

We remain extremely concerned about the TCEQ guidance referenced by the applicant in the Modeling Report that was submitted as an assessment of the ozone impacts from the proposed source in its PSD permit application. Based on the results of this guidance, TCEQ and the applicant determined that the project is "ozone neutral." In the past, TCEQ has relied upon large NO<sub>x</sub> reductions to decrease ozone levels in ozone SIPs for the HGB and DFW areas. The current TCEQ approach for this permit relies upon science that assumes that the source has to emit VOCs at a sufficient level to chemically react with the source's NO<sub>x</sub> emissions to generate ozone. We disagree that VOC emissions have to be co-emitted at the source to cause impacts on ozone levels. Although TCEQ indicated this analysis is not based on the Scheffe Point Source Screening Tables for determining ozone ambient impacts, the approach and interpretation does not clearly demonstrate that the source will not adversely impact control strategies developed to reduce ozone in the nearby HGB non-attainment area. TCEQ and the applicants should utilize a technically appropriate modeling technique and should work with us (in accordance with PSD regulations and Appendix W) to determine whether a potential impact from this facility would cause or contribute to a potential violation of the ozone NAAQS standards or impacts on nearby non-attainment areas. TCEQ has not provided us a demonstration that this facility will not negatively impact ozone levels in Matagorda County or the HGB non-attainment area. If such modeling has been prepared by the applicant or TCEQ, we request that it be made available to us and the public for review.

## **II. Plantwide Applicability Limit (PAL)**

Since EPA has not approved TCEQ's PAL provisions into the SIP and proposed disapproval of such provisions on September 23, 2009, (74 FR 48474), any PAL permit issued by TCEQ to a new major stationary source may be considered a non-SIP-approved permit by EPA. We identified in our Federal Register notice that PAL permits can only be issued to *existing* major stationary sources, which precludes applicability of a PAL to a new major stationary source, as required under 40 CFR §§ 51.165(f)(1)(i) and 51.166(w)(1)(i). Without at least 2 years of operating history, a potential source like White Stallion Energy Center has not established actual emissions to facilitate development of a PAL.

required under 40 CFR §§ 51.165(f)(1)(i) and 51.166(w)(1)(i). Without at least 2 years of operating history, a potential source like White Stallion Energy Center has not established actual emissions to facilitate development of a PAL.

### **III. Particulate Matter (PM) 2.5**

We reviewed the TCEQ's Response No. 4 in the RTC filed on October 2, 2009, regarding PM<sub>2.5</sub>. However, we have concerns regarding TCEQ's reliance on the PM<sub>10</sub> surrogate policy. It is now necessary to provide a demonstration to support the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub>. The applicant should submit a revised application or demonstration addressing PM<sub>2.5</sub> emissions. See, *In re Louisville Gas and Electric*, Petition No. IV-2008-3 (Order on Petition). The additional information should either address PM<sub>2.5</sub> emissions directly or show how compliance with the PSD requirements for PM<sub>10</sub> will serve as an adequate surrogate for meeting the PSD requirements for PM<sub>2.5</sub> in this specific permit, after considering and identifying any remaining technical difficulties with conducting an analysis of PM<sub>2.5</sub> directly. The permit record must reflect a demonstration to support the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub>. We have worked with other permitting authorities and permit applicants to establish an appropriate PM<sub>2.5</sub> modeling protocol. If the applicant chooses to model for PM<sub>2.5</sub> impacts directly, please contact us to develop a methodology that will ensure that an appropriate analysis is performed.

### **IV. Integrated Gasification Combined Cycle (IGCC) Consideration**

The TCEQ indicated in its RTC on page 29 of 61 in the Executive Director's Response to Comments that neither the applicant nor TCEQ evaluated any other electrical generation methods such as IGCC or pulverized coal (PC) boilers. TCEQ indicated that inclusion of IGCC in the Best Available Control Technology (BACT) evaluation would require substantial redesign of the applicant's proposed facility. Later in the same response, TCEQ indicates that it does not require a review of IGCC as part of the BACT review for electric generating units (EGUs).

In at least one federal permitting action, IGCC was considered an available control option in the BACT analysis for a facility proposed to generate electricity from coal. See *Prairie State Generating Company* (Illinois). Further, in a recent decision, the EPA Environmental Appeals Board (EAB) remanded the permit because it did not contain an adequate justification for excluding IGCC from the BACT analysis for a coal fired power EGU. See *Desert Rock Energy Company, LLC*, PSD Appeal Nos. 08-03 et.al. Slip. Op. at 76-77 (EAB Sept. 25, 2009). This EAB decision was followed in the Title V order for the petition on the American Electric Power Service Corporation, Southwestern Public Service Company John W. Turk order responding to a Title V petition (Petition Number VI-2008-1), where the EPA Administrator found that the Arkansas Department of Environmental Quality (ADEQ) failed to provide an adequate justification to support its conclusion in the PSD BACT analysis that IGCC technology should be eliminated from consideration on the grounds that it would "redefine" the proposed source. To meet the applicable legal criteria under the PSD program, a BACT analysis for each pollutant must consider "application of production processes or available methods, systems, and techniques ... for control of such pollutant." See 40 C.F.R. §§ 51.166(b)(12) and 40 C.F.R. § 52.21(b)(12). Therefore,

when a potential pollution control strategy is not considered in a BACT analysis, the record should provide a reasoned basis to show why that option is not available in a particular instance. We recognize that TCEQ has made a good faith effort to address this issue consistent with prior EPA determinations. However, in light of the EAB's recent conclusions, we strongly recommend that TCEQ and the permit applicant specifically address any IGCC technology considerations as a part of their BACT analysis and provide a reasoned explanation consistent with the EAB's position to support any decision to eliminate such an option or to exclude it altogether from a BACT analysis for this proposed source.

#### **V. BACT Limits Based on Clean Fuels**

It is unclear if the TCEQ or the applicant considered "clean fuels" in its BACT analysis. Comment 27 in the response to comments indicates that commenters stated that the applicant and TCEQ failed to consider alternative fuels to reduce emissions such as using only Powder River Basin (PRB) coals. TCEQ stated in its response that the "applicant proposes the facility to accomplish its objective based upon its business decisions. Those decisions include the applicant's choice of fuels. The applicant designed the plant using its choice of fuels and TCEQ reviewed the application as it was submitted. TCEQ does not specify the type of fuel to use in a fossil fuel electric generation plant because the cost of fuel is a primary business decision consideration that is up to the applicant to determine."

We believe the TCEQ should analyze the possibility of cleaner fuels as an alternative primary fuel source in the RTC. At this time, TCEQ does not include a federally approved definition of BACT in its State rules. The Clean Air Act includes the term "clean fuels" in the definition of BACT after the term "fuel cleaning." 42 U.S.C. § 7479(1). Thus, when a potential pollution control strategy is not evaluated in detail in a BACT analysis, the record should provide a reasoned basis to show why that option is not "available" in a particular instance. EPA has recognized that "available" options for a particular facility do not necessarily have to include options that would fundamentally "redefine" the source proposed by the permit applicant. See, e.g., *In re: Desert Rock Energy Company, LLC, PSD Appeal No. 08-03 et al*, slip op. at 59-65 (EAB, September 24, 2009). However, EPA interprets the Act to require a reasoned justification, based on an analysis of the underlying administrative record for each permit, to support a conclusion that an option is not "available" in a given case on the grounds that it would fundamentally "redefine the source." *Desert Rock*, slip op. at 63-72, 76. Based on the record here, it does not appear that TCEQ has provided a reasoned explanation demonstrating why the option of using PRB coals is not "available" for this facility.

We believe TCEQ must clearly provide a rationale for why utilizing fuels other than Illinois coal and/or petroleum coke, or blends from each of the proposed identified fuels constitutes "redefining the source". Further, the rationale should state if there are economic, environmental, or energy impacts from the use of PRB coals (or lower sulfur petroleum coke) that weigh against its selection as BACT,. We acknowledge that States with SIP-approved PSD programs have independent discretion and are not necessarily required to follow all EPA policies or interpretations. See, e.g., 57 Fed. Reg. 28093, 28095 (June 24, 1992). However, states that issue PSD permits under SIP-approved regulations are required to conduct a BACT analysis that is

reasoned and faithful to the statutory framework. See *Alaska Dept of Env'tl Conservation v. EPA*, 540 U.S. 461, 484-91 (2004).

On the question of whether an option may be excluded because it redefines the proposed source, the EAB has developed an analytical framework that EPA uses to assess this issue in its own permitting decisions. See, e.g., *Prairie State*, slip op. at 26-37 ; *Desert Rock*, slip op. at 59-65. Since the EAB has articulated a foundation for its approach that has been upheld by one U.S. Court of Appeals, we strongly recommend that SIP-approved States follow the framework articulated by the EAB. We are not concluding that the present permit limits do not represent BACT - only that the present permit record does not appear to provide a sufficient rationale to demonstrate the adequacy of the BACT determinations for this facility. In addition, we are not expressing a policy preference for utilization of a particular coal type, or coal from a particular coal basin. EPA supports the development and use of a broad range of fuels and technologies across the energy sector including those that will enable the sustainable use of coal. Our primary concern is the adequacy of TCEQ's response and rationale for excluding PRB or the possibility of utilizing lower sulfur coal or lower sulfur petroleum coke as fuel options.

# **ATTACHMENT D**



ATTACHMENT A

F-146

TEXAS AIR CONTROL BOARD  
12124 PARK 35 CIRCLE, AUSTIN, TEXAS 78753, 512/908-1000

KIRK P. WATSON  
CHAIRMAN

BOB G. BAILEY  
VICE CHAIRMAN

STEVEN N. SPAW, P.E.  
EXECUTIVE DIRECTOR



SUZANNE I. AHN, M.D.  
JACK V. MATSON, Ph.D., P.E.  
CALVIN B. PARNELL, JR., Ph.D., P.E.  
WILLIAM H. QUORTLUP  
C. H. RIVERS  
WARREN H. ROBERTS  
MARY ANNE WYATT

April 17, 1992

A. Stanley Meiburg, Ph.D.  
Director  
Air, Pesticides and Toxics Division (6T)  
ENVIRONMENTAL PROTECTION AGENCY  
Region 6  
1445 Ross Avenue  
Dallas, Texas 75202-2733

Re: Texas Prevention of  
Significant Deterioration  
State Implementation Plan

Dear Dr. Meiburg:

This is in response to your letter of March 30, 1992 concerning Texas Prevention of Significant Deterioration (PSD) State Implementation Plan. We understand that you need confirmation in several areas to conform with the requirements of the 1990 Federal Clean Air Act Amendment (FCAAA) before final delegation will be made. As in your letter, we will address each issue in order.

Municipal Waste Combustion  
We will address as a major source subject to PSD review, municipal waste combustors capable of changing more than 50 tons of refuse per day as one of the sources subject to PSD review if they emit or have the potential to emit 100 tons per year or more of any regulated pollutant.

Air Toxics Exemption of National Emission Standards for Hazardous Air Pollutants - Title III of the 1990 CAAA  
We understand that the FCAAA of 1990 exempts from PSD review those air contaminants listed in Section 112(b)(1) except for toxics impact and Best Available Control Technology (BACT) analysis. We have been and will continue to follow this guidance in PSD review.

Class I Area Boundary Changes  
We recognize the changes in Class I boundaries and will continue to solicit and consider comments from Federal Land Managers, when applicable, in PSD permit review.

Exhibit 1

A. Stanley Meiburg, Ph.D.    -2-

April 17, 1992

Clean Fuels in PSD Permitting

We will consider in our evaluation of PSD applications clean fuels as an available means of reducing emissions, along with other approaches in our BACT analyses.

We understand that the Environmental Protection Agency will discuss with us any changes to PSD rules that affect nonroad engines or nonroad vehicles. We will appreciate a high level of communication regarding this matter and look forward to providing comments concerning this subject.

We appreciate your cooperation and assistance in our work.

Sincerely,



Steve Spaw, P.E.  
Executive Director

# **ATTACHMENT E**



# TEXAS AIR CONTROL BOARD

6330 HWY. 290 EAST, AUSTIN, TEXAS 78723, 512/451-5711

*Steve Spaw*  
*LEP file*

DICK WHITTINGTON, P.E.  
CHAIRMAN

BOB G. BAILEY  
VICE CHAIRMAN

ALLEN ELI BELL  
EXECUTIVE DIRECTOR



JOHN L. BLAIR  
MARCUS M. KEY, M.D.  
OTTO R. KUNZE, Ph.D., P.E.  
HUBERT OXFORD, III  
WILLIAM H. QUORTRUP  
C. H. RIVERS  
MARY ANNE WYATT

RECEIVED

SEP 11 1989

ENFORCEMENT PROGRAM

RECEIVED

SEP 8 1989

DEPUTY EXECUTIVE DIRECTOR

September 5, 1989

Mr. Robert Layton, Jr., P.E.  
Regional Administrator  
U. S. Environmental Protection Agency  
1445 Ross Avenue  
Dallas, Texas 75202

Dear Mr. Layton:

This is in reply to Mr. Bill Hathaway's letter of July 25, 1989 regarding proposed approval of the Texas Prevention of Significant Deterioration (PSD) revisions to the State Implementation Plan. That letter notes concerns regarding implementation by the Board of the PSD program, and requests certain commitments in order to address those concerns.

The commitments requested in Mr. Hathaway's letter are the result of comments from a Texas Air Control Board (TACB) staff member to a member of your staff in a letter dated January 19, 1989. Mr. Hathaway's letter states that these comments indicated a lack of intent to follow federal interpretations of the Clean Air Act and Environmental Protection Agency (EPA) operating policies, most specifically, the "Top-Down" approach for Best Available Control Technology (BACT) analysis in reviewing PSD permit applications. I have reviewed the referenced letter and am satisfied that, although severe in certain criticisms, it was written to address unresolved staff concerns regarding PSD implementation in Texas and should not be construed as representing a lack of intent on the part of our agency to implement federal requirements. In that regard, I am pleased to note that substantial progress toward resolving those concerns has been made through recent grant negotiations. In any event, you may be assured that the position of the agency is, and will continue to be, to implement EPA requirements relative to programs for which we have received State Implementation Plan approval, and to do so as effectively as possible. In the same vein, we appreciate EPA's continued assistance in coordinating federal initiatives with Texas' comprehensive permit program without undue disruption.

Exhibit 1

*Handwritten signature*

Mr. Robert Layton

-2-

September 5, 1989

Again, the TACB is committed to the implementation of EPA decisions regarding PSD program requirements. We look forward to approval of the PSD revisions and believe EPA will find the management of that program in Texas to be capable and effective.

Sincerely,



Allen Eli Bell  
Executive Director

# **ATTACHMENT F**



**SOAH DOCKET NO. 582-09-3008  
TCEQ DOCKET NO. 2009-0283-AIR**

**APPLICATIONS OF WHITE § BEFORE THE STATE OFFICE  
STALLION ENERGY CENTER, §  
LLC FOR STATE AIR QUALITY §  
PERMIT 86088; PREVENTION OF §  
SIGNIFICANT DETERIORATION §  
AIR QUALITY PERMIT PSD-TX- § OF  
1160 AND FOR HAZARDOUS AIR §  
POLLUTANT MAJOR SOURCE §  
[FCAA § 112(g)] PERMIT HAP-28 §  
AND PLANTWIDE §  
APPLICABILITY LIMIT PAL-48 § ADMINISTRATIVE HEARINGS**

**SIERRA CLUB AND THE NO COAL COALITION'S OFFER OF PROOF**

**TO THE HONORABLE ADMINISTRATIVE LAW JUDGES PAUL KEEPER AND  
KERRIE JO QUALTROUGH:**

**I. OFFER OF PROOF**

Sierra Club and the No Coal Coalition (Protestants) file this Offer of Proof and would respectfully show as follows:

1. On November 2, 2009, pursuant to Order No. 2 and the Rule 11 Agreement entered into by the parties, Protestants Sierra Club and the No Coal Coalition pre-filed testimony in the above-referenced docket.
2. On November 20, 2009, Applicant White Stallion Energy Center, LLC (Applicant) filed its *Objections to Protestants' Prefiled Testimony and Exhibits*.
3. On November 20, 2009, the Executive Director of the Texas Commission on Environmental Quality (ED) filed its *Objections to Protestants Sierra Club and No Coal Coalition's Prefiled Testimony and Exhibits*.

4. On pages 2-3 and 19 of the Applicant's *Objections*, Applicant objected to the testimony of Bill Powers, P.E. related to carbon dioxide (CO<sub>2</sub>) and greenhouse gases on page 47, starting at line 23 through page 48, line 15, including a table on page 48 and all referenced exhibits (there were none) of Mr. Powers Prefiled Testimony which is found in the record as Sierra Club/No Coal Coalition Exhibit 200. On pages 5 and 18 of the Applicant's *Objections*, Applicant also objected to the testimony of Mr. Powers related to IGCC on page 41, starting at line 10 through page 47, line 21 of Mr. Powers Prefiled Testimony Sierra Club/No Coal Coalition Exhibit 200. In addition, the Applicant objected to certain exhibits related to this testimony which are found in the record as Sierra Club/No Coal Coalition Exhibit 216.
5. On page 2 of the ED's *Objections*, the ED objected to the testimony of Mr. Powers related to CO<sub>2</sub> and greenhouse gases on page 47, line 25 through p. 48, line 15 of Mr. Powers' Prefiled Testimony, which is found in the record as Sierra Club/No Coal Coalition Exhibit 200. On page 2 of the ED's *Objections*, the ED also objected to the testimony of Mr. Powers related to IGCC and carbon capture and sequestration starting on page 43, line 29 through page 45, line 10 of Mr. Powers Prefiled Testimony, Sierra Club/No Coal Coalition, Exhibit 200.
6. On December 14, 2009, in Order No. 11, the Honorable Administrative Law Judges sustained the Applicant's and the ED's objections in the following respects:
  - a. Exhibit 200 at page 41, line 10 through page 47, line 21 (Applicant)
  - b. Exhibit 216 (The exhibit related to Bill Power's testimony at Page 41, Line 21)
  - c. Exhibit 200 at page 43, line 23 through page 45, line 10 (ED)
  - d. Exhibit 200 at page 47, line 25 through page 48, line 15 (ED)

7. On December 14, 2009, in Order No. 11, the Honorable Administrative Law Judges also overruled the objection by the Applicant to Exhibit 200 at p. 41, line 10 through p. 47, line 21.
8. On December 23, 2009, in Sierra Club and the No Coal Coalition's *Response to Order No. 11 Evidentiary Rulings*, starting at p. 9, Sierra Club and the No Coal Coalition requested that the Honorable Administrative Law Judges clarify and/or reconsider their ruling on IGCC. Specifically, Sierra Club and the No Coal Coalition noted the conflicting rulings regarding Applicant's objection to Exhibit 200 at p. 41, line 10 through page 47, line 21. Specifically, Sierra Club and the No Coal Coalition asked that if the ALJs determined that IGCC was not relevant to likewise strike IGCC evidence in the Applicant's exhibits. Finally, Sierra Club and the No Coal Coalition asked the ALJs to reconsider any ruling that IGCC testimony was not relevant.
9. On January 14, 2010 in Order No. 12, the Honorable Administrative Law Judges declined to reconsider the previous rulings regarding Sierra Club and the No Coal Coalition's evidence.
10. At the hearing on the merits, Sierra Club and the No Coal Coalition once again asked the Honorable Administrative Law Judges to clarify their rulings with regard to IGCC. At the hearing on the merits, the ALJs clarified that the IGCC testimony in Sierra Club/No Coal Coalition Exhibit 200 at page 41, line 10 through page 47 line 21 was not admissible. Likewise, the Honorable Administrative Law Judges determined that IGCC testimony from the Applicant was not admissible. Appropriate sections of Applicant Exhibits 102 and 104 were marked to reflect the exclusion of IGCC evidence.

11. TCEQ Rule 80.129 provides that formal exception to the ruling of the Administrative Law Judges is not necessary to preserve Protestants' rights on appeal. 30 Tex. Admin. Code § 80.129.
12. TCEQ rule 80.127(d)(3) provides that, if an exhibit which has been excluded is not withdrawn, it shall be included in the record for the purpose of preserving the objection on appeal. 30 Tex. Admin. Code § 80.127.
13. Sierra Club and the No Coal Coalition hereby submit notice that Protestants do not withdraw any of the IGCC or greenhouse gas testimony excluded from Exhibit 200 or Exhibit 216.
14. For the purpose of ensuring a complete administrative record, Sierra Club and the No Coal Coalition hereby submit this Offer of Proof with respect to the IGCC and greenhouse gas testimony in Exhibit 200 and Exhibit 216 that were not admitted into the record.
15. Copies of the relevant testimony and Exhibit 216 are attached. Copies of the following related documents from this record are also attached.
  - a. Order No. 2
  - b. September 29, 2009 Rule 11 Agreement
  - c. November 20, 2009, Applicant White Stallion Energy Center, LLC's *Objections to Protestants' Prefiled Testimony and Exhibits*
  - d. November 20, 2009, Executive Director of the Texas Commission on Environmental Quality's *Objections to Protestants Sierra Club and No Coal Coalition's Prefiled Testimony and Exhibits*

- e. December 9, 2009, *Protestants Sierra Club and the No Coal Coalition's Response to Applicant White Stallion Energy Center, LLC's and Executive Director's Objections to Protestants' Prefiled Testimony*
- f. Order No. 11
- g. Order No. 12
- h. December 23, 2009, Sierra Club and the No Coal Coalition's *Response to Order No. 11 Evidentiary Rulings* (without attachments)

16. Other portions of Mr. Powers testimony at Sierra Club/No Coal Coalition Exhibit 200 have been stricken from the record. While Sierra Club and the No Coal Coalition are not detailing those rulings and strikes in this offer of proof, Sierra Club and the No Coal Coalition hereby provide notice that no portions of previously offered testimony are being withdrawn.

## II. PRAYER

Sierra Club and the No Coal Coalition respectfully present this Offer of Proof the Administrative Law Judges and respectfully request that, the prior ruling notwithstanding, the attached testimony and exhibit be admitted as evidence in this docket. In the alternative, Sierra Club and the No Coal Coalition respectfully request that the attached testimony from Exhibit 200 and Exhibit 216 be included in the record of this docket.

Respectfully Submitted,

**ENVIRONMENTAL INTEGRITY PROJECT**

By:

  
\_\_\_\_\_

Layla Mansuri  
Texas Bar No. 24040394  
Christina Mann  
Texas Bar No. 24041388  
Ilan Levin  
Texas Bar No. 00798328  
1303 San Antonio Street, Suite 200  
Austin, Texas 78701  
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ATTORNEYS FOR PROTESTANTS  
SIERRA CLUB AND NO COAL  
COALITION

# **ATTACHMENT G**



January 8, 2010

Honorable Judge Paul D. Keeper  
State Office of Administrative Hearings  
P.O. Box 13025  
Austin, Texas 78711-3025

*via Facsimile and Hand-Delivery*

Re: TCEQ Docket No. 2009-0283-AIR; SOAH Docket No. 582-09-3008; *Application of White Stallion Energy Center LLC for State Air Quality Permit 86088, Prevention of Significant Deterioration Air Quality Permit PSD-TX-1160, Hazardous Air Pollutant Permit HAP-28, and Plantwide Applicability Limit PAL-48.*

Dear Judges Keeper and Qualtrough,

Enclosed for filing in the above-referenced cause, please find 2 copies Sierra Club and No Coal Coalition's Request for a Commission to Take Deposition, and a draft subpoena. A copy of this filing is being served on all other parties to this matter and two copies are being filed with the TCEQ Chief Clerk.

As described on the attached document, counsel for Protestants wish to depose a corporate representative of Haldor Topsoe on the issue of NOx control technologies. Counsel (Mr. Ilan Levin) has contacted individuals within this organization to attempt to come to an agreement (November 18, 2009 phone conversation, December 3, 2009 email, and follow up phone messages before the holidays) regarding logistics and identification of which corporate representative would sit for the deposition. Such attempts have been unsuccessful. We propose a date for the deposition of February 4, 2010. Protestants will provide the witness fee and serve the deposition notice concurrent with the subpoena, once your honors agree to issue the subpoena.

Thank you for your attention to this mater. Please call me at (512) 637-9477 should you have any questions.

Sincerely,



Christina Mann

Enclosure

cc: LaDonna Castañuela, TCEQ Chief Clerk (*via Electronic Submission*)  
Service List (*via Electronic Mail*)

**Exhibit 1**

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of Sierra Club and No Coal Coalition's Request for a Commission to take Deposition was served on this the 8<sup>th</sup> day of January, 2010, by the method indicated below.



Christina Mann

**For the Applicant**

*Via Electronic Mail*

Eric Groten  
Patrick Lee  
Vinson & Elkins, L.L.P.  
2801 Via Fortuna  
Suite 100  
Austin, Texas 78746-7658  
Phone: (512) 542-8400  
Email: egroten@velaw.com  
plee@velaw.com

**For the Executive Director**

*Via Electronic Mail*

Booker Harrison  
Ben Rhem  
Texas Commission on Environmental Quality  
Environmental Law Division, MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087  
Phone: (512) 239-4113  
Fax: (512) 239-0606  
Email: booharri@tceq.state.tx.us  
brhem@tceq.state.tx.us

**For the Public Interest Counsel**

*Via Electronic Mail*

Scott Humphrey  
Texas Commission on Environmental Quality  
Office of Public Interest Counsel, MC-175  
P.O. Box 13087  
Austin, Texas 78711-3087  
Phone: (512) 239-0574  
Fax: (512) 239-6377  
Email: shumphre@tceq.state.tx.us

**For Environmental Defense Fund**

*Via Electronic Mail*

Paul Tough  
Gregory Friend  
McElroy, Sullivan & Miller L.L.P.  
P.O. Box 12127  
Austin, Texas 78711  
Phone: (512) 327-8111  
Fax: (512) 327-6566  
Email: ptough@msmtx.com  
gfriend@msmtx.com

**REQUEST FOR A COMMISSION TO TAKE DEPOSITION**

Party Requesting:

Date of Request:

Sierra Club and No Coal Coalition

January 8, 2010

Telephone Number(s):

Style or Number of Case:

(512) 636- 9477

APPLICATIONS OF WHITE STALLION ENERGY CENTER, LLC FOR STATE AIR QUALITY PERMIT 86088; PREVENTION OF SIGNIFICANT DETERIORATION AIR QUALITY PERMIT PSD-TX-1160 AND FOR HAZARDOUS AIR POLLUTANT MAJOR SOURCE [FCAA § 112(g)] PERMIT HAP-28 AND PLANTWIDE APPLICABILITY LIMIT PAL-48

Witness to be deposed: Haldor Topsoe, Inc., 17629 El Camino Real Houston, TX 77058, USA.

Address: 17629 El Camino Real Houston, TX 77058, USA

And/or

Probable Location: The Deposition may occur in Houston, TX or another location convenient to deponent.

1. Has the witness been asked to appear at the deposition? **YES**

If yes, describe the circumstances of the contact: On or about Tuesday, November 17, 2009, Ilan Levin, Senior Attorney, EIP, left a voicemail for Mr. Nathan White, Director of Business Development, Haldor Topsoe, Inc., at Mr. White's Houston office. On November 18, 2009, Mr. George Fishman of Haldor Topsoe, Inc., returned the phone call. Mr. Levin explained the nature of the matter to Mr. Fishman. Mr. Levin explained that EIP represents Sierra Club and No Coal Coalition in a contested air permitting matter for the proposed White Stallion Energy Center near Bay City, Texas, before the Texas Commission on Environmental Quality and the State office of Administrative Hearings. Mr. Levin further explained that one contested issue is the feasibility of selective catalytic reduction on coal and petroleum coke-fired CFB boilers. Mr. Levin explained that

**Exhibit 1**

Sierra Club believes the testimony of Haldor Topsoe, Inc. (Haldor), a catalyst vendor with worldwide experience on difficult applications, would aid the trier of fact and the parties. Mr. Fishman explained that he is generally familiar with regulatory proceedings, and would not be opposed to providing information if authorized to do so by his employer or required to do so. Mr. Levin suggested Mr. Fishman check his calendar for schedule conflicts, and that a January deposition in Houston, or another location convenient to Mr. Fishman and Haldor, would be preferable. Mr. Fishman asked Mr. Levin to send him information, via email, on the gas stream characteristics, fuel analysis, and/or trace constituents specific to the WSEC, because that information would be required in order to answer with certainty any questions regarding the feasibility of SCR on the WSEC CFBs. On December 3, 2009, Mr. Levin emailed Mr. Fishman the WSEC application materials containing fuel data and other information regarding WSEC. Because several relevant documents regarding WSEC fuel data have been marked “confidential” by the Applicant, Sierra Club has not provided all fuel data in its possession at this time. Mr/ Levin followed up these communications before the holidays with two voicemails and has not yet received further communication from either Mr. White or Mr. Fishman.

2. Explain the relevance of the witness' testimony and/or documents:

Haldor Topsoe, Inc. is a catalyst vendor with worldwide experience developing systems to remove NOx from exhaust gas streams, including systems designed for utility boilers. Testimony of Haldor will aid the parties and/or the trier of fact in determining whether SCR is “best available control technology” for control of NOx.

3. Is the information requested of the witness available from another source?

Potentially. However, the information is not available from any source that is accessible without a similar deposition. Haldor Topsoe is a worldwide leader in the field of catalysts for SCRs and is a more than suitable and appropriate source for this information.

Is the witness an expert? **He or she (the corporate representative) may be qualified as an expert**

4. Estimate the number of days that this witness will be needed: One day for a deposition.

5. Estimate the total travel mileage from the witness' residence to the deposition:

Unknown, but Protestants are willing to conduct the deposition at the Houston offices or other agreeable location.

6. Upon the witness' appearance at the hearing, tender a witness fee in the amount of \$95.00 per day plus \$0.28 per mile if the hearing is more than 25 miles from the witness' residence for each day the person is necessarily present as a witness, unless the witness and/or the person who has called the witness provides the Judge with written documentation of Agreement to Waive the Witness Fee, or if the witness is a "party witness."

Sierra Club and No Coal Coalition are willing to pay all required and any reasonable and necessary travel costs for this witness to appear and will deliver a check made out to the witness concurrent with service of this document.

7. What date is the deposition scheduled to begin? Sierra Club and No Coal Coalition propose February 4, 2010.

8. What are the dates that this witness is requested to be at the deposition? The deposition will only take one day, and the witness is only requested for February 4, 2010.

9. List the documents that you would like this witness to produce:

All documents relevant to the question of whether SCR is feasible for coal/petcoke-fired CFB boilers. All documents relevant to whether Haldor would provide or has provided a "make-right guarantee" for any kind of SCR on a coal/petcoke-fired CFB. All documents relevant to the emission limits or reduction efficiencies that Haldor would provide or has provided in any "make-right guarantee" for NOx of .05 lb/ MMBTU or better.

SOAH DOCKET NO. 582-09-3008  
TCEQ DOCKET NO. 2009-0283-AIR

§  
APPLICATIONS OF WHITE §  
STALLION ENERGY CENTER, LLC § BEFORE THE STATE OFFICE  
FOR STATE AIR QUALITY PERMIT §  
86088; PREVENTION OF §  
SIGNIFICANT DETERIORATION §  
AIR QUALITY PERMIT PSD-TX-1160 § OF  
AND FOR HAZARDOUS AIR §  
POLLUTANT MAJOR SOURCE §  
[FCAA § 112(g)] PERMIT HAP-28 §  
AND PLANTWIDE APPLICABILITY § ADMINISTRATIVE HEARINGS  
LIMIT PAL-48 §

SUBPOENA

TO: ANY SHERIFF OR CONSTABLE OF THE STATE OF TEXAS, OR TO ANY OTHER  
PERSON WHO IS NOT A PARTY AND IS NOT LESS THAN EIGHTEEN YEARS OF AGE

GREETINGS: You are hereby authorized and required, pursuant to TEX GOV'T CODE ANN § 2001.089  
(Vernon 2000 and Supp. 2004) and the Rules of Procedure of the Texas Commission on Environmental  
Quality, to summon, Haldor Topsoe, Inc. who is represented to reside, or who may be found at 17629 El  
Camino Real Houston, TX 77058, USA to appear at a deposition in a the above-referenced matter  
docketed before the State Office of Administrative Hearings (SOAH) and assigned to Judges Paul Keeper  
and Kerri Qualtrough, Administrative Law Judges of SOAH, duly authorized and empowered to issue  
subpoenas and commissions for deposition. You may summon Haldor Topsoe, Inc via service upon its  
Registered Agent, C T Corporation System, who is represented to reside, or who may be found at 350 N.  
St. Paul Street, Dallas, TX 75201, USA. The deposition in the above-referenced matter is scheduled for  
10 am, February 4, 2010, at 17629 El Camino Real Houston, TX 77058, USA and the witness shall attend  
the deposition from day to day until discharged.

You are directed to order the witness to bring with him/her the following records or documents:

All documents relevant to the question of whether SCR is feasible for coal/petcoke-fired CFB boilers.

All documents relevant to whether Haldor would provide or has provided a “make-right guarantee”

for any kind of SCR on a coal/petcoke-fired CFB. All documents relevant to the emission limits or

reduction efficiencies that Haldor would provide or has provided in any “make-right guarantee” for

NOx of .05 lb/ MMBTU or better.

Issued this \_\_\_\_ day of January \_\_\_\_, 2010 at the insistence of Sierra Club and No Coal Coalition in said docketed matter.

---

**PAUL KEEPER**  
**KERRI QUALTROUGH**  
**ADMINISTRATIVE LAW JUDGE**  
**STATE OFFICE OF ADMINISTRATIVE HEARINGS**

**RETURN OF SERVICE**

Came to hand on the \_\_\_\_\_ day of \_\_\_\_\_, 2010, at \_\_\_\_\_ o'clock \_\_\_\_\_.m.

Executed at \_\_\_\_\_, within the County of \_\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_\_.m. on the \_\_\_\_\_ day of \_\_\_\_\_, 2010, by delivering to the within named witness, **CT Corporation System**, in person, a true copy of this subpoena.

To certify which witness my hand officially.

SHERIFF/CONSTABLE/AUTHORIZED PERSON  
\_\_\_\_\_ County, Texas

# **EXHIBIT 2**



# TEXAS AIR CONTROL BOARD

6330 HWY. 290 EAST, AUSTIN, TEXAS 78723, 512/451-5711

*Steve Spaw*  
*LEP file*

DICK WHITTINGTON, P.E.  
CHAIRMAN

BOB G. BAILEY  
VICE CHAIRMAN

ALLEN ELI BELL  
EXECUTIVE DIRECTOR



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MARCUS M. KEY, M.D.  
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HUBERT OXFORD, III  
WILLIAM H. QUORTRUP  
C. H. RIVERS  
MARY ANNE WYATT

RECEIVED

SEP 11 1989

ENFORCEMENT PROGRAM

RECEIVED

SEP 8 1989

DEPUTY EXECUTIVE DIRECTOR

September 5, 1989

Mr. Robert Layton, Jr., P.E.  
Regional Administrator  
U. S. Environmental Protection Agency  
1445 Ross Avenue  
Dallas, Texas 75202

Dear Mr. Layton:

This is in reply to Mr. Bill Hathaway's letter of July 25, 1989 regarding proposed approval of the Texas Prevention of Significant Deterioration (PSD) revisions to the State Implementation Plan. That letter notes concerns regarding implementation by the Board of the PSD program, and requests certain commitments in order to address those concerns.

The commitments requested in Mr. Hathaway's letter are the result of comments from a Texas Air Control Board (TACB) staff member to a member of your staff in a letter dated January 19, 1989. Mr. Hathaway's letter states that these comments indicated a lack of intent to follow federal interpretations of the Clean Air Act and Environmental Protection Agency (EPA) operating policies, most specifically, the "Top-Down" approach for Best Available Control Technology (BACT) analysis in reviewing PSD permit applications. I have reviewed the referenced letter and am satisfied that, although severe in certain criticisms, it was written to address unresolved staff concerns regarding PSD implementation in Texas and should not be construed as representing a lack of intent on the part of our agency to implement federal requirements. In that regard, I am pleased to note that substantial progress toward resolving those concerns has been made through recent grant negotiations. In any event, you may be assured that the position of the agency is, and will continue to be, to implement EPA requirements relative to programs for which we have received State Implementation Plan approval, and to do so as effectively as possible. In the same vein, we appreciate EPA's continued assistance in coordinating federal initiatives with Texas' comprehensive permit program without undue disruption.

Exhibit 2

*Handwritten signature*

Mr. Robert Layton

-2-

September 5, 1989

Again, the TACB is committed to the implementation of EPA decisions regarding PSD program requirements. We look forward to approval of the PSD revisions and believe EPA will find the management of that program in Texas to be capable and effective.

Sincerely,



Allen Eli Bell  
Executive Director