

TCEQ DOCKET NUMBER 2007-0598-AIR

IN THE MATTER OF
AMERICAN ELECTRIC POWER
WELSH POWER STATION
AIR QUALITY PERMIT
NOS. 4381 & PSD-TX-3,
TITUS COUNTY, TEXAS
REGULATED ENTITY NO. 100213370
CUSTOMER REFERENCE NO.
600126767 ACCOUNT NO. TF 0012D

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BEFORE THE
TEXAS COMMISSION
ON
ENVIRONMENTAL
QUALITY

2007 MAY 16 PM 4:30
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO MOTION TO OVERTURN

The Executive Director of the Texas Commission on Environmental Quality (TCEQ) files this response to a Motion to Overturn filed April 19, 2007 by Sierra Club and Public Citizen (Movants), challenging the Executive Director's issuance on March 20, 2007 of an alteration to air quality permits 4381 and PSD-TX-3 for operation of American Electric Power's (AEP) Welsh Power Station (Welsh Plant) in Titus County, Texas. Southwestern Electric Power Company (SWEPCO) is a subsidiary of AEP.

HISTORY OF PERMIT ISSUANCE, RENEWAL AND ALTERATION

The Welsh Plant includes three coal-fired boiler units for electric power generation, permitted separately more than twenty-five years ago. The various permits were issued, renewed and combined, as follows:

Unit 1: original construction and operating permits number 1166, issued by the Texas Air Control Board (TACB) in mid 1970s. This unit was grandfathered out of the federal Prevention of Significant Deterioration permitting program.

Units 2 and 3: These boiler units were originally authorized by the United States Environmental Protection Agency (EPA) under permit number PSD-TX-3 in 1975 for particulate matter and sulfur dioxide (SO₂). The TACB issued state construction permits numbers 4349 and 4381, respectively, in 1976, and state operation permits in 1982.

Permit renewals were issued for the first time in 1994 (Unit 1) and 1998 (Units 2 and 3).¹ At the renewal of permits for Units 2 and 3 in 1998, the permits were combined under the current permit numbers, 4381 and PSD-TX-3. See Attachment A.

¹ Until sunset review of the TACB in 1985, the Texas Clean Air Act (TCAA) did not include permit renewal requirements. In 1985, the TCAA was amended to include a 15 year permit term; in 1991, this was revised to a ten year term. Tex. Health & Safety Code § 382.055.

The most recent action is the alteration issued March 20, 2007 that is the subject of this Motion. See Attachment B.

PERMIT AMENDMENT VERSUS PERMIT ALTERATION

Alterations have long been a mechanism for authorizing changes to facilities; they were formally codified in 1993 in 30 Tex. Admin. Code § 116.116, regarding Changes to Facilities. The applicable portions of the rule are subsections (b) and (c). The analysis performed for all change requests via alterations is to determine whether the request meets the requirement of an alteration, defined by rule, as follows:

(c) Permit alteration.

(1) A permit alteration is:

- (A) a decrease in allowable emissions; or
- (B) any change from a representation in an application, general condition, or special condition in a permit that does not cause:
 - (i) a change in the method of control of emissions;
 - (ii) a change in the character of emissions; or
 - (iii) an increase in the emission rate of any air contaminant.²

If the Air Permits Division determines that the request does not meet the requirements of an alteration, then the request must be reviewed as permit amendment. Permit amendments are required if the change will cause:

- (A) a change in the method of control of emissions;
- (B) a change in the character of the emissions; or
- (C) an increase in the emission rate of any air contaminant.³

In this alteration, it is undisputed that there is no increase or a decrease in allowable emissions of any of the regulated contaminants, nor is there any change in the character of emissions. It is also undisputed that there is no increase in allowable emissions. Movants concern appears to be that the alteration will result in an increase in actual emissions. The analysis below demonstrates that the changes requested by AEP will not result in a change in the method of control of emissions nor an increase in the emission rate of any air contaminant, and therefore the procedural mechanism of an alteration is the legally appropriate mechanism to approve a change for the operation of these facilities.

² 30 Tex. Admin. Code § 116.116(c) (1).

³ 30 Tex. Admin. Code § 116.116(b) (1).

ANALYSIS OF ISSUES RAISED

Deletion of the Heat Input Limit Meets the Definition of an Alteration

An alteration was the appropriate form of permit authorization to delete the heat input for the Welsh Plant. This change was not a change in the method of emission control, and no increase in the emission rate of any contaminant is expected or authorized.

With regard to methods of control, the pre-alteration and post-alteration methods of control at the Welsh Plant include electrostatic precipitators for particulate control, low NO_x burners and over-fired air for NO_x control, good combustion for control of CO and VOC emissions, and the use of low sulfur coal for control of SO₂ emissions. Removal of any references to heat input does not change any of these control methods.

Since the early days of the Texas air quality permitting program, applicants have commonly included information provided by equipment manufacturers in their applications, such as heat input. For many years this information has been and still is included in permits. This design value information can and is used to establish initial emission rates. At that time, design values more accurately depicted what was expected to be normal operations, and production parameters such as steam production, power production, and heat input that were assumed to be related to emission rates have been used to demonstrate compliance. However, in today's permitting arena, where manufacturers have better design capabilities, the practice is to estimate higher design values to minimize the need for future changes to a permit based on actual operating conditions. And, over time, regulatory agencies have moved away from production parameters and more to direct emission measures in permits. Therefore, although the heat input was a representation made by AEP and a limit for these boiler units, it is not the best or most accurate information that can be used to determine whether the boiler units are in compliance with the control methods and emission rates. The Welsh units are currently equipped with NO_x and SO₂ continuous emissions monitoring systems (CEMS).

In addition, the TCEQ Air Permits Division (APD) staff looked at other information to determine whether physical changes had been made at the Welsh Plant that would result in an increase in heat input and a possible increase in emissions. APD staff examined AEP's records of capital expenditures to identify potential modifications to the combustion boilers that could result in an emissions increase. APD staff also evaluated NO_x and SO₂ acid rain emissions data measured by CEMS and heat input values for all three utility boilers covering nine years of operation to determine whether there were any discernable emission increases that could have been linked to expenditures. No physical changes were identified.⁴

Removing any heat input references in the permit does not allow an increase in the emission rate of any air contaminant, since heat input and emission rates are not necessarily linearly related. In addition to heat input, other factors can also affect the quantity of emissions, such as the ash content and alkalinity of the coal. AEP presented stack sampling data that suggested that the relationship between emission rates and heat input are not linear.

⁴ Further, AEP has had no change in fuel (with the one exception approved in 1995 for a one year period).

AEP presented APD with heat input rates, and NO_x and SO₂ emission rates from Welsh and non-Welsh electric generating units to demonstrate a non-linear relationship between heat input and emissions. APD staff also evaluated actual emissions data from EPA's Acid Rain Data Base that were obtained by CEMS. Table 1 below, using acid rain data, illustrates that SO₂ emissions and heat input are not necessarily linearly related and that other factors besides heat input will affect emissions. Notice that at higher heat inputs, emissions are actually lower.

Table 1: Comparison of Differences in Heat Input and Differences in SO₂ Emissions

Unit No.	Actual Heat Input BBtu/Yr (Year)	Actual Heat Input BBtu/Yr (Year)	Difference in Heat Input (%)	Actual SO ₂ Emissions TPY (Year)	Actual SO ₂ Emissions TPY (Year)	Difference in SO ₂ Emissions (%)
1	40273 (1998)	45987 (2000)	+ 14.1	15,607 (1998)	14,023 (2000)	- 10.1
2	40672 (1998)	46987 (1999)	+ 15.5	15,534 (1998)	14,510 (1999)	- 6.5
3	39657 (1998)	44330 (2001)	+ 11.7	15,575 (1998)	13,799 (2001)	- 11.4

The heat input limit was not included in any special condition in the permits until added in a parenthetical notation in special conditions 2-4 in the renewed/combined permits in 1998. After reviewing the files, APD staff concluded that heat input is not the best method to determine whether the Welsh Plant is operated in compliance with its emissions limits. For example, as noted above, CEMS are used for NO_x and SO₂ emissions, but not for VOC, PM and CO emissions. Because the actual emissions are dependent upon a number of other factors, heat input is not the best surrogate for these emissions which are not monitored by CEMS. Therefore, to provide a better way to determine compliance with established emissions limits, the alteration removed the heat input limit and established periodic stack sampling for those emissions not measured by a CEMS.⁵

Movants state TCEQ has always considered the heat input limit for the Welsh units to be an enforceable limit and has determined that an exceedance amounts to a violation. However, the Executive Director's Office of Compliance and Enforcement (OCE) staff has included this as a violation in an ongoing enforcement action, and until the enforcement is finally resolved, the violation is only considered an *alleged* violation. However, as discussed below, this enforcement matter remains pending and should not be relied upon as a final determination of compliance.

⁵ See Special Condition #29 in Attachment A.

Clarifying the Sulfur Limit in the Coal is on a "Wet-Weight" Basis Meets the Definition of an Alteration

An alteration was the appropriate form of permit authorization to clarify the basis for the percent by weight (wt. %) of the sulfur in the coal burned as fuel in the boiler units. This change was not a change in the method of emission control, and no increase in the emission rate of any contaminant is expected or authorized. Clarification that the sulfur content of the coal is on a wet basis instead of a dry basis would not allow an increase in the emission rate of SO₂, because the current permitted sulfur content was based upon a wet basis, which tends to agree more with currently permitted mass emission rate limitations and permitted SO₂ performance standards than would a sulfur limitation on a dry basis.

Movants argue that AEP has failed to comply with the limit on sulfur content of the coal, and that this noncompliance together with the Executive Director's decision to change from a dry to wet-weight basis of sulfur content will result in an increase of SO₂ emissions. This argument is based on Movants' understanding that the 0.5 wt. % total sulfur by weight for each of the three units has always been based on the dry weight of the coal, basing this assumption on the technical review document associated with the renewal of the permits in 1998. They also rely on Table 6 included in the renewal application for Units 2 and 3, which they understand states that the sulfur content of the fuel burned is 0.5 wt. % and the table characteristics correspond to the dry weight values given in the original analysis.

Movants ignore the history of not only these permits and the associated applications, but the history of how air permitting has evolved, specifically in establishing limits for emissions and how those limits are documented. Although the Motion includes some of the same information reviewed by APD staff (discussed below), the Movants' arguments ignore how the representations evolved over time.⁶ Given that AEP has always represented it would use low sulfur coal, the difference is how the percent by weight of sulfur is expressed in terms of "wet" or "dry" coal. A simple calculation shows that the representation has essentially not changed since the original application was submitted for Unit 1.

APD staff conducted an in-depth review of the original and renewal applications submitted since 1973. This review revealed three different descriptions of sulfur content of the low-sulfur bituminous coal to be fired in the Welsh boilers were submitted: 0.5 wt. % dry, 0.5 wt. % wet and 0.48 wt. % at 32% moisture.⁷ Information in the file consistently indicates that

⁶ See Attachment C (part of this is also in Movants' Attachment J). These two Table 6s were part of the 1997 renewal application for Units 2 and 3, and does not include any notation as to "wet" or "dry" weight. See Attachment D, which are two other Table 6s submitted earlier (one of these is also the seventh page of Movants' Attachment J) which indicates dry weight values are included.

⁷ In addition to the two versions of Table 6 included in Attachment J from the original and renewal applications, the file contains other references to these values. See Attachment E, which includes three examples of information submitted on behalf of AEP: (a) The 1994 renewal application for Unit 1 (see second and fourth pages, which indicate Btu values consistent with wet-weight values); (b) excerpt from the 1998 renewal application (which includes wet-weight coal feed rate and Btu heating value); and (c) Letter dated March 1, 1998 (see item #1 on page 1 which states that the fuel flow rate and coal heating values represented in the initial construction application and the renewal application are different because the coal heating value is given on a dry-basis in the construction application and on an as-received [i.e., wet] basis in the renewal application.

approximately 30% of the weight of coal, as received, is water. Therefore, in determining whether there may be an increase in emissions, careful review of this information is necessary to ensure that appropriate values are properly matched. AEP, like most owners and operators of coal-fired utility boilers, does not physically dry the coal before burning it. Rather, the issue is whether the coal feed rate and heating value are mathematically adjusted to account for moisture content to determine compliance with the permit.

For example, in the original application for Unit 1 submitted in 1973, Table 6 includes the following information: the coal feed rate (indicated as the "Design Maximum") is "437,500 lb/hr(dry)," "Gross Heating Value of fuel (dry)" of 11,780 Btu/lb and the fuel sulfur content of 0.5 wt. %. Table 6 of the renewal application for Units 2 and 3 revised these amounts to 625,000 and 8,350 Btu/lb, respectively, maintaining the 0.5 wt. % fuel sulfur content. The 625,000 lb/hr or similar wet coal feed rates were also used elsewhere in the original applications.⁸ Although these representations are different in coal feed rate and heating value, the difference between the two feed rates is the approximate moisture content (30%) of the coal. See calculation below:

$$\frac{(625,000 - 437,500)}{625,000} (100\%) = 30\%$$

At the time the original application was submitted for Unit 1, permits did not include stated mass emission rate limits (pounds per hour or tons per year), commonly used today and typically listed in maximum allowable emission rate tables (MAERT) as part of the permit. Instead, compliance was determined with meeting the applicable federal new source performance standards (NSPS), 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971. Subpart D required, and still requires, compliance with a mass emission rate of 1.2 lb SO₂/MMBtu. At the time this permit was issued, permit limits were generally not set below the NSPS. AEP presented to APD a compelling evaluation of lb SO₂/MMBtu confirming that any sulfur content limitations would have been based upon a wet basis and not a dry basis. Further, since MAERT tables were not part of the original permits, it is clear that this representation was not a representation or limit for all purposes, such as specific emission limits.

When reviewing the alteration request, APD staff discovered there was no basis to include the 0.5 wt. % limit in the renewal, since it was not a representation that was used to establish the emissions for the MAERTs, initially established in the 1994 and 1998 renewed permits. The recordkeeping requirements in the combined permit were based upon demonstrating compliance with NSPS and mass emission limits in the MAERT, which were not based upon the 0.5 wt. % sulfur content of the coal. The representation of 0.5% wt. sulfur is intended to indicate that low sulfur coal would be burned at the Welsh Plant.⁹ There is no basis to conclude that the agency intended to include a more stringent coal sulfur limit in the renewed/combined permit issued in 1998.

⁸ The file review indicated that the mass emission rate of 6,076 lb/hr mass emission rate limit for Units 2 and 3, corresponded to a .48 wt. % wet sulfur content at 32% moisture with a feed rate of 633,000 lb/hr coal. These values were used in the modeling demonstration.

⁹ Coals with a 0.5 wt. % sulfur on a wet or dry basis are both considered low sulfur coal.

Using the two SO₂ mass emission limits from the renewed permit MAERTs and from the file to back calculate for sulfur content, it is clear that the 0.5 wt. % sulfur content was not an emissions limitation. The two mass emission rates were 5,771 lb/hr from the EPA issued PSD permit¹⁰ for Units 2 and 3, and 6,187 lb/hr for Unit 1 based upon the NSPS performance standard. Table 2 below shows that the 0.5 wt. % sulfur was not used to establish emission limits; however, if coal sulfur content was the basis for permitted emission rates, then 0.5 wt. % on a wet basis would more accurately reflect that basis than 0.5 wt. % on a dry basis.

Table 2: Back-calculation of percent sulfur weight.

SO2 Emission Rate (lb/hr)	Coal Feed Rate (lb/hr)	Back Calculated wt % S
5,771	437,500 (1)	0.659
5,771	625,000 (2)	0.461
5,771	633,000 (2)	0.455
6,187	437,500 (1)	0.707
6,187	625,000 (2)	0.495
6,187	633,000 (2)	0.489

Notes: (1) Dry feed rate as represented on Table 6 in the application for Unit 1 (See Attachment D).

(2) Wet feed rate as represented on Table 6 in the renewal application for Units 2 and 3 (See Attachment C).

Because the mass emission limits were not based upon the 0.5 % wt. sulfur on a dry basis and the permitted mass emission rates more closely reflect 0.5 % wt. on a wet basis, then clarifying any perceived inconsistencies in the permit files confirms that the coal sulfur content was on a wet basis and there would be no increase in permitted emission rates. APD concluded that the coal sulfur content was not intended to be an emission limitation and removal or changing a non-limit would not increase SO₂ emissions and could therefore be authorized via an alteration.

In addition to its own review, APD staff agrees with the information in AEP's "Summary of Permit Application Coal Information for Welsh Power Plant Units 1-3."¹¹ This information is consistent with the information gathered in the permit file review.

Finally, the renewed/combined permit, including the representations in Table 6, allows SO₂ emission rates that are based on a wet-weight basis. The emission rates are 6,187; 5,771; and 5,771 lb/hr for the three units, respectively. Special Condition 6 limits fuel to fuel containing no more than 0.5 wt. % total sulfur by weight. As shown in Table 2 above, this would equate to an approximate feed rate of 625,000 lb/hr. Therefore, this alteration further clarifies that the fuel sulfur content is on a wet-weight basis, rather than relying on calculations to confirm compliance with this limit.

¹⁰ It is unknown how EPA arrived at the 5,771 lb/hr limit for the original PSD permit for Units 2 and 3, but that limit remains in place.

¹¹ See Attachment F.

Pending Enforcement is Not an Impediment to Issuance of This Permit Alteration

Movants suggest permit changes are not acceptable if there is an enforcement action involving alleged violations of the exact same permit terms, but cite no authority for their position. The purpose of the Executive Director's Preliminary Report and Petition (EDPR)¹² is to place the outstanding violations into the formal enforcement process. Because AEP contested the EDPR,¹³ this is still a contested matter. There is no prohibition against permit actions involving facilities that are under enforcement. It is a long standing and very common practice for owners and operators of facilities with emissions of air contaminants to seek changes to permits, and even initial authorizations, after receiving a notice of violation or notice of enforcement from the TCEQ.¹⁴ The Executive Director's staff in the Offices of Compliance and Enforcement (OCE) and Permitting, Registration and Remediation (OPRR) had ongoing communications throughout the time the enforcement and permitting matters were pending. Prior to approval of the alteration, OCE and OPRR staff agreed that there was no enforcement related reason for the alteration not to be issued.

As of the date of filing this response, the enforcement action remains pending. The permit alterations will not affect the violations alleged in the EDPR. Specifically, any alleged permit violations are tied to the permit that was in effect at the time the violations were noted in the May 25, 2004 investigation cited in the EDPR. Subsequent changes to the permit do not affect those alleged violations. Rather, the Executive Director will review the evidence and the permit in existence at the time of the investigation when evaluating the permit violations alleged in the EDPR.

Therefore, the Executive Director disagrees that pending enforcement is a basis for granting the Motion to Overturn.

¹² See Movants' Exhibit D.

¹³ AEP SWEPSCO filed a general denial and asserted affirmative defenses on May 2, 2005.

¹⁴ In this case, TCEQ's Tyler Regional Office conducted an investigation of the Welsh Plant on May 25, 2004, and subsequently issued a Notice of Enforcement to SWEPSCO on July 19, 2004. These are included to Movants' MTO attachments F and D, respectively. AEP's original alteration request was filed August 6, 2004, and revised March 8, 2007, Attachment G.

CONCLUSION AND RECOMMENDATION

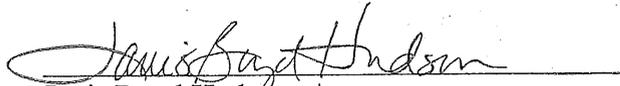
As demonstrated above, the changes meet the definition of an alteration, and resulted in a more understandable and enforceable permit. The Executive Director recommends the commission find (1) that an alteration was the legally correct permitting mechanism for the requested change, and (2) that these changes are not required to be processed as permit amendments. The Executive Director further recommends the commission uphold the permit alteration issued March 20, 2007, and deny all relief requested by Movants.

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Glenn Shankle, Executive Director

Stephanie Bergeron Perdue, Deputy Director
Office of Legal Services

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Environmental Law Division



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CERTIFICATE OF SERVICE

I certify that the original Executive Director's Response to Motion to Overturn was filed with Office of the Chief Clerk on this 16th day of May, 2007. I also certify that a true and correct copy of the foregoing document has been served on the following via hand delivery, facsimile, electronic mail, first class mail, and/or overnight mail on this day.

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ATTACHMENT A

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

September 10, 1998

Mr. Kris Gaus
Project Administrator
Southwestern Electric Power Company
Environmental Services - N6ENV
P.O. Box 660164
Dallas, Texas 75266-0164

Re: Permit Renewal and
Permit Consolidation
Permit Nos. 4381 and PSD-TX-3,
4379 and PSD-TX-899, and 1166
Standard Exemption Nos. 38370 and 33325
Permit Authorizations Dated:
November 10, 1987, April 3, 1992, and
August 14, 1998
Welsh Power Plant
Pittsburg, Titus County
Account ID No. TF-0012-D

Dear Mr. Gaus:

This is in response to your renewal application, Forms PI-1R, concerning the proposed renewal of Permit Nos. 4381 and PSD-TX-3. We understand that you propose to consolidate the above-referenced permits and roll in the above referenced standard exemptions and permit authorizations into Permit Nos. 4381 and PSD-TX-3.

This will acknowledge that your application for the above-referenced permit is technically complete as of March 17, 1998. Pursuant to 30 TAC Section 116.314(a), your consolidated permit is hereby renewed. Enclosed is a permit for your facility. Also enclosed are new special conditions and a maximum allowable emission rates table. We will appreciate your carefully reviewing the conditions of the permit and assuring that all requirements are consistently met.

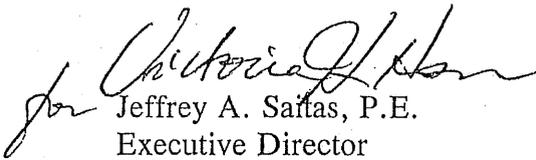
This permit will be in effect for ten years from the date of approval. If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

Mr. Kris Gaus
Page 2
September 10, 1998

Re: Permit Nos. 4381 and PSD-TX-3

Thank you for your cooperation in sending us the information necessary to evaluate your operations and for your commitment to air pollution control. If you have any questions, please call Ms. Ozden Tamer, Ph.D., at (512) 239-4577 or write at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,


for Jeffrey A. Saftas, P.E.
Executive Director

JS/MT/jo

Enclosures

cc: Mr. Charles Murray, Air Program Manager, Tyler

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO

Southwestern Electric Power Company

AUTHORIZING THE CONTINUED OPERATION OF

Welsh Power Plant

LOCATED AT

Pittsburg, Titus County, Texas

LATITUDE 33° 03' 30" LONGITUDE 094° 50' 45"

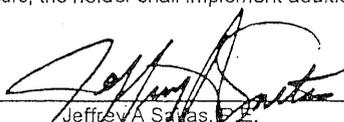
1. The facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Executive Director of the Texas Natural Resource Conservation Commission (TNRCC or Commission) to amend this permit in that regard and such amendment is approved. (Title 30 Texas Administrative Code Section 116.116 (30 TAC 116.116))
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of date of issuance, discontinues construction for more than 18 consecutive months prior to completion, or fails to complete construction within a reasonable time. Upon request, the Executive Director may grant a onetime 18-month extension of the date to begin construction. (30 TAC 116.115(b)(2)(A))
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate Regional Office of the TNRCC not later than 15 working days after occurrence of the event. (30 TAC 116.115(b)(2)(B))
4. **Start-up Notification.** The appropriate Air Program Regional Office of the Commission shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the TNRCC may be present. Phased construction, which may involve a series of units commencing operations at different times, shall provide separate notification for the commencement of operations for each unit. (30 TAC 116.115(b)(2)(C))
5. **Sampling Requirements.** If sampling of stacks or process vents is required, the permit holder shall contact the TNRCC Office of Air Quality prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the Executive Director and coordinated with the regional representatives of the Commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. (30 TAC 116.115(b)(2)(D))
6. **Equivalency of Methods.** It shall be the responsibility of the permit holder to demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the Executive Director prior to their use in fulfilling any requirements of the permit. (30 TAC 116.115(b)(2)(E))
7. **Recordkeeping.** A copy of the permit along with information and data sufficient to demonstrate compliance with the permit shall be maintained in a file at the plant site and made available at the request of personnel from the TNRCC or any air pollution control program having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the permit holder in the permit application. This information shall include, but is not limited to, production records and operating hours. Additional recordkeeping requirements may be specified in special conditions attached to the permit. Information in the file shall be retained for at least two years following the date that the information or data is obtained. (30 TAC 116.115(b)(2)(F))
8. **Maximum allowable emission rates.** The total emissions of air contaminants from any of the sources of emissions listed in the table entitled "Emission Sources - Maximum Allowable Emission Rates" shall not exceed the values stated on the table attached to the permit. (30 TAC 116.115(b)(2)(G))
9. **Maintenance of Emission Control.** The facilities covered by the permit shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. Notification for upsets and maintenance shall be made in accordance with §101.6 and §101.7 of this title (relating to Notification Requirements for Major Upset and Notification Requirements for Maintenance). (30 TAC 116.115(b)(2)(H))
10. **Compliance with Rules.** Acceptance of a permit by a permit applicant constitutes an acknowledgement and agreement that the holder will comply with all rules, regulations, and orders of the Commission issued in conformity with the Texas Clean Air Act and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition are applicable, then the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of Commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. (30 TAC 116.115(b)(2)(I))
11. This permit may be appealed pursuant to 30 TAC 50.39.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. (30 TAC 116.110(d)).
13. This permit expires 10 years from date of issuance unless renewed as provided in Section 382.055 of the TCAA unless a shorter time period is specified in the special conditions of this permit.
14. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. (30 TAC 116.115(c))
15. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in Section 382.003(3) of the Texas Clean Air Act (TCAA) or violate Section 382.085 of the TCAA. If the Executive Director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

4381 and PSD-TX-3

PERMIT

September 10, 1998

DATE


Jeffrey A. Santos, P.E.
Executive Director
Texas Natural Resource Conservation Commission

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. The annual rates are based on a rolling 12-month period.

If one emission rate limitation should be more stringent than another emission rate limitation, the more stringent limitation shall govern and be the standard by which compliance will be determined.

2. Sulfur dioxide (SO₂) emissions from the stack of the Unit 1 Boiler, designated as Emission Point No. (EPN) 1, shall not exceed 1.2 lb/MMBtu while firing at full load (5,156 MMBtu/hr, Nameplate Capacity: 558 MW). The heat input limit is based upon higher heating value of the fuel.
3. Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), SO₂, particulate matter (PM), and volatile organic compounds (VOC) from the stack of the Unit 2 Boiler, designated as EPN 2, shall not exceed the following limits while firing at full load (5,156 MMBtu/hr, Nameplate Capacity: 558 MW):

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.085 lb/MMBtu (3-hr rolling average)
SO ₂	1.1 lb/MMBtu (3-hr rolling average)
PM	0.075 lb/MMBtu (3-hr rolling average)
VOC	0.073 lb/MMBtu (3-hr rolling average)

4. Emissions of NO_x, CO, SO₂, PM, and VOC from the stack of the Unit 3 Boiler, designated as EPN 3, shall not exceed the following limits while firing at full load (5,156MMBtu/hr, Nameplate Capacity: 558 MW):

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.0303 lb/MMBtu (3-hr rolling average)
SO ₂	1.12 lb/MMBtu (3-hr rolling average)
PM	0.069 lb/MMBtu (3-hr rolling average)
VOC	0.0036 lb/MMBtu (3-hr rolling average)

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

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5. Opacity of emissions from the Unit 1 Boiler stack (EPN Boiler 1), Unit 2 Boiler stack (EPN Boiler 2), and Unit 3 Boiler stack (EPN Boiler 3) must not exceed 20 percent averaged over a six-minute period, except for those periods described in Texas Natural Resource Conservation Commission (TNRCC) 30 TAC Section 111.111(a)(1)(E) of Regulation I.
6. Fuels used in the Unit 1, 2, and 3 Boilers shall be limited to the following:
 - A. Sub-bituminous coal containing no more than 0.5 percent total sulfur by weight.
 - B. No. 2 fuel oil containing no more than 0.5 percent total sulfur by weight.

The use of any other fuel will require a modification to this permit.

FEDERAL REQUIREMENTS

7. The sources covered under this permit shall comply with the requirements of Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources promulgated for Fossil Fuel-Fired Steam Generators in Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subparts A and D including the applicable test methods and procedures specified in 40 CFR 60.46. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit condition shall govern and be the standard by which compliance shall be demonstrated.

COMPLIANCE TESTING

8. For Unit 1 and Unit 2 Boilers, initial compliance testing for PM, SO₂, NO_x, and opacity was completed on July 15 through 18, 1980. Initial compliance testing has not been performed for Unit 3 Boiler based on the fact that this boiler is very similar in design and operation to the Unit 1 and Unit 2 Boilers. Additional testing shall be performed for all three boilers when required by the Executive Director of the TNRCC.

CONTINUOUS DETERMINATION OF COMPLIANCE

9. In order to demonstrate continuous compliance with the opacity limit of Special Condition No. 5, the holder of this permit shall operate and maintain a certified continuous emission monitoring system for measuring opacity of emissions.

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

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10. In order to demonstrate continuous compliance with the SO₂ emission limit as stated in Special Condition Nos. 2, 3, and 4, the holder of this permit shall measure and record SO₂ emissions using one of the methods specified in 40 CFR 75.11(a).
11. Data from the continuous emission monitors for flow, SO₂, NO_x, CO₂, and continuous opacity monitors required by 40 CFR 60 and 40 CFR 75 may be used to determine compliance with the conditions of this permit.

ASH HANDLING

12. Emissions from the fly ash silo vents shall be controlled with Baghouses (EPN-7, EPN-8, and EPN-9).
13. Emissions from fly ash loading into trucks from the fly ash silos shall be controlled by venting the displaced air through the Silo Baghouses (EPN Ash1, EPN Ash 2, and EPN Ash 3).

RECORDKEEPING

14. For all emission sources covered under this permit, all emission records and all continuous monitor measurements, including monitor performance testing measurements, all monitor calibration checks and adjustments, and maintenance performed on these systems must be retained for at least five years and must be made available upon request to the Executive Director or any agent of the TNRCC.
15. For Unit 1, 2, and 3 Boilers, the permittee shall maintain records of monitoring data for three-hour rolling average of SO₂ emissions in lb/MMBtu of heat input, during periods of oil firing. These records shall be made available to the TNRCC Executive Director or the designated representative upon request.
16. The holder of this permit shall retain records of the average fuel-firing rate, in units of tons of coal per hour and million British thermal units per hour (MMBtu/hr) for a minimum of two years from the date of recording. The average fuel firing rate, in units of tons of coal per hour and MMBtu/hr, shall be calculated at least monthly. This information may be used to determine compliance with the emissions limitations of Special Condition No. 1.

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 4

17. The firing rate (MMBtu/hr) of fuel oil shall be recorded for each 24-hour time period of fuel oil firing, along with the date, time, and duration of fuel oil firing. The quantity, higher heating value, grade(s), and percent sulfur content (by weight) of the fuel oil fired shall be clearly noted for each occurrence. This data shall be maintained in a permanent form suitable for inspection.
18. The holder of this permit shall retain records of the electric power generating rate in Unit 1, 2, and 3 Boilers in units of megawatts, for a minimum of two years from the date of recording.
19. The holder of this permit shall comply with the applicable recordkeeping requirements of 40 CFR 60.7; 40 CFR 60.45g, and 40 CFR 75.

REPORTING

20. The holder of this permit shall comply with the applicable reporting requirements of 40 CFR 60.7, 40 CFR 60.45g, and 40 CFR 75.
21. If the electric power generation of the Unit 1 and 2 Boiler exceeds, by more than 10 percent, the electric power (in megawatts) maintained during initial compliance testing, the company must notify, in writing, the Executive Director of the TNRCC; and the source may be subject to additional sampling to demonstrate continued compliance with all applicable state and federal regulations.

ADDITIONAL CONDITIONS

22. The evaporation of nonhazardous turbine cleaning waste is authorized in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
 - A. Injection rate shall not exceed 5 gal/min,
 - B. The approximate quantity of turbine cleaning fluid evaporated in Unit 2 Boiler will be 8,100 gallons for the 27 hour boiler evaporation operation,
 - C. Total emissions for all air contaminants during this evaporation procedure shall not exceed 1.73 pounds/hr and 0.0234 ton/year.

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 5

23. The evaporation of nonhazardous boiler cleaning waste generated as the result of periodic cleaning (once every six to eight years) of Unit 1, 2, and 3 Boilers located at Southwestern Electric Power Company's Wilkes Power Plant is authorized in Unit 1 Boiler of Welsh Power Plant with the following limitations:
 - A. The injection rate of the boiler cleaning waste shall be at the maximum rate of 50 gallons per minute until all of the cleaning waste is evaporated,
 - B. The quantity of boiler cleaning waste transported from the Wilkes Power Plant to the Welsh Power Plant to be burned in the Unit 1 Boiler will be approximately 65,000 gallons.
24. The permittee is authorized to burn spent activated carbon generated every two years from the Welsh Power Plant's water treatment system in Unit 1, 2, and 3 Boiler, after it is blended with coal, with the following limitations:
 - A. Maximum feed rate shall not exceed 1,712 pounds/hr,
 - B. The quantity of spent activated carbon to be burned in the boilers will be approximately 33,000 pounds for the 20 hours burn operation.
25. The permittee is authorized to evaporate ammoniated citric acid cleaning solution per each boiler cleaning episode in Unit 1, 2, and 3 Boilers of the Welsh Power Plant by injection with the following limitations:
 - A. The injection rate of the cleaning solution shall not exceed 50 gallons per minute,
 - B. The quantity of cleaning solution to be evaporated in the boilers will be approximately 140,000 gallons.
26. The permittee is authorized to evaporate spent boiler cleaning solution generated from cleaning of Unit 3 Boiler in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
 - A. The maximum evaporation rate is 27 gallons per minute,
 - B. The quantity of spent boiler cleaning solution to be evaporated in Unit 2 Boiler will be approximately 180,000 gallons.
 - C. Evaporation procedure will be conducted once every six to eight years.

SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 6

27. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TNRCC or any local air pollution control agency having jurisdiction.
28. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
 - A. The facility identification numbers as submitted to the Emission Inventory Section of the TNRCC.
 - B. The EPNs as listed on the maximum allowable emission rates table.
29. Upon request by the Executive Director of the TNRCC or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sampling and/or analysis of the fuel(s) utilized in the boiler or shall allow the TNRCC or any other air pollution control agency representatives to obtain a sample for analysis.

Dated September 10, 1998

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 4381 and PSD-TX-3

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
EPN-1	Unit 1 Boiler	NO _x	3609.2	15808.3
		CO	153.7	673.2
		VOC	18.4	80.6
		SO ₂	6187.2	27100
		PM	515.6	2258.3
EPN-7	Fly Ash Silo No. 1	PM	96.0	420.1
EPN-2	Unit 2 Boiler	NO _x	3609	15808
		CO	438	1916
		VOC	19	82
		SO ₂ (4)	5771	25277
		PM (4)	387	1694
EPN-8	Fly Ash Silo No. 2	PM	<0.1	<0.1
EPN-3	Unit 3 Boiler	NO _x	3609	15808
		CO	156	684
		VOC	19	82
		SO ₂ (4)	5771	25277
		PM(4)	358	1569
EPN-9	Fly Ash Silo No. 3	PM	<0.1	<0.1

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

RFI

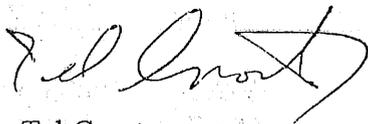
03/31/97

Southwestern Electric Power Co.

Acct. # TF-0012-D

Permit # 4379

Southwestern had no formal action taken in the last five years, they had one violation which was resolved informally. There is no problem with this application.



Tel Croston

Enforcement Coordinator

Air Section / Enforcement Division

ATTACHMENT B

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 20, 2007

Mr. Kris Gaus
Air Quality Specialist
Quality Environmental Protection
American Electric Power
P.O. Box 660164
Dallas, Texas 75266-0164

Re: Permit Alteration
Permit Numbers: 4381 and PSD-TX-3
Welsh Power Station
Regulated Entity Number: RN100213370
Customer Reference Number: CN600126767
Account Number: TF0012D

Dear Mr. Gaus:

This is in response to your letter dated March 8, 2007, requesting revision of Special Condition Nos. 2, 3, 4, and 6A of the above-referenced permit. We understand you seek to remove design heat input values and name plate generator ratings that were listed in your permit, and clarify that the sulfur content limit of the coal is on an as received "wet basis." We also understand you seek to add Special Condition No. 29, which will require additional stack sampling of particulate matter, carbon monoxide, and volatile organic compounds every third years.

As indicated in Title 30 Texas Administrative Code § 116.116(c), and based on our review, your request is hereby approved and Permit Numbers 4381 and PSD-TX-3 are altered. Enclosed are the altered permit conditions and MAERT to replace those currently attached to your permit. Please note that the enclosed MAERT does not reflect the currently applicable nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compound (VOC) emission limits, which are the limits specified in the MAERT attached to Ms. Anne Inman's letter dated May 27, 2005. We remind you that those NO_x, CO, or VOC emission limits should be incorporated in accordance with Texas Commission on Environmental Quality (TCEQ) guidance at time of renewal or amendment.

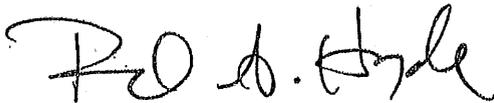
Mr. Kris Gaus
Page 2
March 20, 2007

Re: Permit Numbers 4381 and PSD-TX-3

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Erik Hendrickson at (512) 239-1095 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,



Richard A. Hyde, P.E., Director
Air Permits Division
Office of Permitting, Remediation, and Registration
Texas Commission on Environmental Quality

RAH/EH/pl

Enclosure

cc: Air Permits Section Chief, New Source Review, Section (6PD-R), Environmental Protection Agency, Region 6, Dallas
Mr. Charles Murray, Air Manager, Region 5 - Tyler

Project Number: 110539

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. The annual rates are based on a rolling 12-month period.

If one emission rate limitation should be more stringent than another emission rate limitation, the more stringent limitation shall govern and be the standard by which compliance will be determined.

2. Sulfur dioxide (SO₂) emissions from the stack of the Unit 1 Boiler, designated as Emission Point No. (EPN) 1, shall not exceed 1.2 lb/MMBtu while firing at full load. (3/07)
3. Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), SO₂, particulate matter (PM), and volatile organic compounds (VOC) from the stack of the Unit 2 Boiler, designated as EPN 2, shall not exceed the following limits while firing at full load: (3/07)

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.085 lb/MMBtu (3-hr rolling average)
SO ₂	1.1 lb/MMBtu (3-hr rolling average)
PM	0.075 lb/MMBtu (3-hr rolling average)
VOC	0.073 lb/MMBtu (3-hr rolling average)

4. Emissions of NO_x, CO, SO₂, PM, and VOC from the stack of the Unit 3 Boiler, designated as EPN 3, shall not exceed the following limits while firing at full load: (3/07)

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.0303 lb/MMBtu (3-hr rolling average)
SO ₂	1.12 lb/MMBtu (3-hr rolling average)
PM	0.069 lb/MMBtu (3-hr rolling average)
VOC	0.0036 lb/MMBtu (3-hr rolling average)

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

Page 2

5. Opacity of emissions from the Unit 1 Boiler stack (EPN Boiler 1), Unit 2 Boiler stack (EPN Boiler 2), and Unit 3 Boiler stack (EPN Boiler 3) must not exceed 20 percent averaged over a six-minute period, except for those periods described in Texas Commission on Environmental Quality (TCEQ) Title 30 Texas Administrative Code § 111.111(a)(1)(E).
6. Fuels used in the Unit 1, 2, and 3 Boilers shall be limited to the following:
 - A. Sub-bituminous coal containing no more than 0.5 percent total sulfur by weight on a wet (as received) basis.
 - B. No. 2 fuel oil.

The use of any other fuel will require a modification to this permit. (3/07)

FEDERAL REQUIREMENTS

7. The sources covered under this permit shall comply with the requirements of the U.S. Environmental Protection Agency regulations on Standards of Performance for New Stationary Sources promulgated for Fossil Fuel-Fired Steam Generators in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts A and D including the applicable test methods and procedures specified in 40 CFR § 60.46. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit condition shall govern and be the standard by which compliance shall be demonstrated.

COMPLIANCE TESTING

8. For Unit 1 and Unit 2 Boilers, initial compliance testing for PM, SO₂, NO_x, and opacity was completed on July 15 through 18, 1980. Initial compliance testing has not been performed for Unit 3 Boiler based on the fact that this boiler is very similar in design and operation to the Unit 1 and Unit 2 Boilers. Additional testing shall be performed for all three boilers when required by the Executive Director of the TCEQ.

CONTINUOUS DETERMINATION OF COMPLIANCE

9. In order to demonstrate continuous compliance with the opacity limit of Special Condition No. 5, the holder of this permit shall operate and maintain a certified continuous emission monitoring system for measuring opacity of emissions.

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

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10. In order to demonstrate continuous compliance with the SO₂ emission limit as stated in Special Condition Nos. 2, 3, and 4, the holder of this permit shall measure and record SO₂ emissions using one of the methods specified in 40 CFR § 75.11(a).
11. Data from the continuous emission monitors for flow, SO₂, NO_x, CO₂, and continuous opacity monitors required by 40 CFR Part 60 and 40 CFR Part 75 may be used to determine compliance with the conditions of this permit.

ASH HANDLING

12. Emissions from the fly ash silo vents shall be controlled with Baghouses (EPN-7, EPN-8, and EPN-9).
13. Emissions from fly ash loading into trucks from the fly ash silos shall be controlled by venting the displaced air through the Silo Baghouses (EPN Ash1, EPN Ash 2, and EPN Ash 3).

RECORDKEEPING

14. For all emission sources covered under this permit, all emission records and all continuous monitor measurements, including monitor performance testing measurements, all monitor calibration checks and adjustments, and maintenance performed on these systems must be retained for at least five years and must be made available upon request to the Executive Director or any agent of the TCEQ.
15. The holder of this permit shall retain records of the average fuel-firing rate, in units of tons of coal per hour and million British thermal units per hour (MMBtu/hr) for a minimum of two years from the date of recording. The average fuel firing rate shall be based on the higher heating value of the fuel. The average fuel firing rate, in units of tons of coal per hour and MMBtu/hr, shall be calculated at least monthly. This information may be used to determine compliance with the emissions limitations of Special Condition No. 1. (3/07)
16. The firing rate (MMBtu/hr) of fuel oil shall be recorded for each 24-hour time period of fuel oil firing, along with the date, time, and duration of fuel oil firing. The quantity, higher heating value and grade(s) of the fuel oil fired shall be clearly noted for each occurrence. This data shall be maintained in a permanent form suitable for inspection. (3/07)

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

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17. The holder of this permit shall retain records of the electric power generating rate in Unit 1, 2, and 3 Boilers in units of megawatts, for a minimum of two years from the date of recording.
18. The holder of this permit shall comply with the applicable recordkeeping requirements of 40 CFR § 60.7; 40 CFR § 60.45g, and 40 CFR Part 75.

REPORTING

19. The holder of this permit shall comply with the applicable reporting requirements of 40 CFR § 60.7, 40 CFR § 60.45g, and 40 CFR Part 75.
20. If the electric power generation of the Unit 1 and 2 Boiler exceeds, by more than 10 percent, the electric power (in megawatts) maintained during initial compliance testing, the company must notify, in writing, the Executive Director of the TCEQ; and the source may be subject to additional sampling to demonstrate continued compliance with all applicable state and federal regulations.

ADDITIONAL CONDITIONS

21. The evaporation of nonhazardous turbine cleaning waste is authorized in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
 - A. Injection rate shall not exceed 5 gal/min,
 - B. The approximate quantity of turbine cleaning fluid evaporated in Unit 2 Boiler will be 8,100 gallons for the 27 hour boiler evaporation operation,
 - C. Total emissions for all air contaminants during this evaporation procedure shall not exceed 1.73 pounds/hr and 0.0234 ton/year.
22. The evaporation of nonhazardous boiler cleaning waste generated as the result of periodic cleaning (once every six to eight years) of Unit 1, 2, and 3 Boilers located at Southwestern Electric Power Company's Wilkes Power Plant is authorized in Unit 1 Boiler of Welsh Power Plant with the following limitations:
 - A. The injection rate of the boiler cleaning waste shall be at the maximum rate of 50 gallons per minute until all of the cleaning waste is evaporated,

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

Page 5

- B. The quantity of boiler cleaning waste transported from the Wilkes Power Plant to the Welsh Power Plant to be burned in the Unit 1 Boiler will be approximately 65,000 gallons.
23. The permittee is authorized to burn spent activated carbon generated every two years from the Welsh Power Plant's water treatment system in Unit 1, 2, and 3 Boilers, after it is blended with coal, with the following limitations:
- A. Maximum feed rate shall not exceed 1,712 pounds/hr.
 - B. The quantity of spent activated carbon to be burned in the boilers will be approximately 33,000 pounds for the 20 hours burn operation.
24. The permittee is authorized to evaporate ammoniated citric acid cleaning solution per each boiler cleaning episode in Unit 1, 2, and 3 Boilers of the Welsh Power Plant by injection with the following limitations:
- A. The injection rate of the cleaning solution shall not exceed 50 gallons per minute.
 - B. The quantity of cleaning solution to be evaporated in the boilers will be approximately 140,000 gallons.
25. The permittee is authorized to evaporate spent boiler cleaning solution generated from cleaning of Unit 3 Boiler in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
- A. The maximum evaporation rate is 27 gallons per minute.
 - B. The quantity of spent boiler cleaning solution to be evaporated in Unit 2 Boiler will be approximately 180,000 gallons.
 - C. Evaporation procedure will be conducted once every six to eight years.
26. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or any local air pollution control agency having jurisdiction.
27. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
- A. The facility identification numbers as submitted to the Emission Inventory Section of the TCEQ.
 - B. The EPNs as listed on the maximum allowable emission rates table.

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

Page 6

28. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sampling and/or analysis of the fuel(s) utilized in the boiler or shall allow the TCEQ or any other air pollution control agency representatives to obtain a sample for analysis.

ADDITIONAL MONITORING

29. The holder of this permit shall perform stack sampling once prior to the expiration date of this permit, and once every third year thereafter as specified in Paragraph C below, to establish the actual quantities of particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC) being emitted into the atmosphere from the Unit 1, 2, and 3 Boilers (EPN-1, EPN-2, and EPN-3). The purpose of such sampling will be to determine compliance with the PM, CO, and VOC emission limits in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and applicable test methods.

The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Tyler Regional Office shall be contacted soon after testing is scheduled but not less than 30 days prior to sampling to schedule a pretest meeting. The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director or the TCEQ Austin Compliance Support Division shall approve or disapprove of any deviation from specified sampling procedures.

SPECIAL CONDITIONS

Permit Numbers 4381 and PSD-TX-3

Page 7

B. Each boiler shall be tested at full load for the atmospheric conditions which exist during testing.

C. Sampling as required by this condition shall be conducted at any time between the first day of March and the last day of October. Additional sampling may be required by the TCEQ or EPA.

D. Within 90 days after the completion of sampling required herein, three copies of the sampling reports shall be distributed as follows:

One copy to the EPA Region 6 Office, Dallas.

One copy to the TCEQ Tyler Regional Office.

One copy to the TCEQ Austin Compliance Support Division.

E. Sampling reports shall comply with the conditions of Chapter 14 of the TCEQ Sampling Procedures Manual. Information in the stack sampling report shall include (at a minimum) the following data for each test run:

- (1) hourly coal firing rate (in tons);
- (2) average coal Btu/lb, expressed both on an as-received basis and a dry basis;
- (3) average steam generation rate in millions of pounds per hour;
- (4) average generator output in MW;
- (5) control device operating parameters;
- (6) emissions in the units of the limits of this permit, lb/hr and lb/MMBtu; and
- (7) any additional records deemed necessary during the stack sampling pre-test meeting.

F. A complete copy of the sampling reports required by this permit condition shall be kept at the plant for the life of the permit. Sampling reports shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction. (3/07)

Dated March 20, 2007

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 4381 and PSD-TX-3

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
EPN-1	Unit 1 Boiler	NO _x	3609.2	15808.3
		CO	153.7	673.2
		VOC	18.4	80.6
		SO ₂	6187.2	27100
		PM	515.6	2258.3
EPN-7	Fly Ash Silo No. 1	PM	96.0	420.1
EPN-2	Unit 2 Boiler	NO _x	3609	15808
		CO	438	1916
		VOC	19	82
		SO ₂ (4)	5771	25277
		PM	387	1694
EPN-8	Fly Ash Silo No. 2	PM	<0.1	<0.1
EPN-3	Unit 3 Boiler	NO _x	3609	15808
		CO	156	684
		VOC	19	82
		SO ₂ (4)	5771	25277
		PM	358	1569
EPN-9	Fly Ash Silo No. 3	PM	<0.1	<0.1

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10} .
 PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
- (4) Boiler SO_2 and PM emissions originally authorized under PSD by letter from EPA dated November 9, 1976, which is supplanted by this permit.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

Dated March 20, 2007

ATTACHMENT C

TABLE 6
BOILERS AND HEATERS

Type of Device: Utility Boiler		Manufacturer: Babcock & Wilcox Company				
Number from flow diagram: EPN 2		Model Number: RB 514				
CHARACTERISTICS OF INPUT						
Type Fuel	Chemical Composition (% by Weight)	Inlet Air Temp F (after preheat)		Fuel Flow Rate (scfm* or lb/hr)		
Pulverized Coal	Typical Ultimate Analysis Carbon 70.00% Hydrogen 4.86% Oxygen 16.61% Ash 7.14% Sulfur 0.50% Nitrogen 0.86% Chlorine 0.03%	635		Average 625,000 lb/hr	Design Maximum 625,000 lb/hr	
		Gross Heating Value of Fuel		Total Air Supplied and Excess Air		
		(specify units) Typical Value 8,250 Btu/lb		Average _____ scfm* _____ % excess (vol)	Design Maximum 1,000,265 scfm* 17 % excess (vol)	
HEAT TRANSFER MEDIUM						
Type Transfer Medium	Temperature F		Pressure (psia)		Flow Rate (specify units)	
(Water, oil, etc.)	Input	Output	Input	Output	Average	Design Maximum
Water	488	1005	2820	2635	3,793,000 lb/hr	Same
OPERATING CHARACTERISTICS						
Ave. Fire Box Temp. at max. firing rate	Fire Box Volume(ft. ³) (from drawing)		Gas Velocity in Fire Box (ft/sec) at max firing rate		Residence Time in Fire Box at max firing rate (sec)	
2,500	434,000		51		2	
STACK PARAMETERS						
Stack Diameter	Stack Height	Stack Gas Velocity (ft/sec)		Stack Gas	Exhaust	
18' x 12'	360'	(@Ave. Fuel Flow Rate)		Temp F	scfm	
		(@Max. Fuel Flow Rate)				
		170		370	1,200,000	
CHARACTERISTICS OF OUTPUT						
Material	Chemical Composition of Exit Gas Released (% by Volume)					
CO ₂	12.4%	NO _x , SO ₂ , CO, and VOC <0.1%, Sec included Table 1(a)				
H ₂ O	10.3%					
O ₂	3.3%					
N ₂	74.0%					
Attach an explanation on how temperature, air flow rate, excess air or other operating variables are controlled.						

Also supply an assembly drawing, dimensioned and to scale, in plan, elevation, and as many sections as are needed to show clearly the operation of the combustion unit. Show interior dimensions and features of the equipment necessary to calculate in performance.

*Standard Conditions: 70 F, 14.7 psia

TABLE 6
BOILERS AND HEATERS

Type of Device: Utility Boiler		Manufacturer: Babcock & Wilcox Company				
Number from flow diagram: EPN 3		Model Number: RB 514				
CHARACTERISTICS OF INPUT						
Type Fuel	Chemical Composition (% by Weight)	Inlet Air Temp F (after preheat)		Fuel Flow Rate (scfm* or lb/hr)		
Pulverized Coal	Typical Ultimate Analysis Carbon 70.00% Hydrogen 4.86% Oxygen 16.61% Ash 7.14% Sulfur 0.50% Nitrogen 0.86% Chlorine 0.03%	635		Average 625,000 lb/hr	Design Maximum 625,000 lb/hr	
		Gross Heating Value of Fuel		Total Air Supplied and Excess Air		
		(specify units) Typical Value 8,250 Btu/lb		Average _____ scfm* _____ % excess (vol)	Design Maximum 1,000,265 scfm* 17 % excess (vol)	
HEAT TRANSFER MEDIUM						
Type Transfer Medium	Temperature F		Pressure (psia)		Flow Rate (specify units)	
(Water, oil, etc.)	Input	Output	Input	Output	Average	Design Maximum
Water	488	1005	2820	2635	3,793,000 lb/hr	Same
OPERATING CHARACTERISTICS						
Ave. Fire Box Temp. at max. firing rate	Fire Box Volume(ft. ³), (from drawing)		Gas Velocity in Fire Box (ft/sec) at max firing rate		Residence Time in Fire Box at max firing rate (sec)	
~2,500	434,000		51		~2	
STACK PARAMETERS						
Stack Diameter	Stack Height	Stack Gas Velocity (ft/sec)		Stack Gas	Exhaust	
18' x 12'	360'	(@Ave. Fuel Flow Rate)	(@Max. Fuel Flow Rate)	Temp F	scfm	
		170	170	370	1,200,000	
CHARACTERISTICS OF OUTPUT						
Material	Chemical Composition of Exit Gas Released (% by Volume)					
CO ₂	12.4%	NO _x , SO ₂ , CO, and VOC <0.1%, See included Table 1(a)				
H ₂ O	10.3%					
O ₂	3.3%					
N ₂	74.0%					
Attach an explanation on how temperature, air flow rate, excess air or other operating variables are controlled.						

Also supply an assembly drawing, dimensioned and to scale, in plan, elevation, and as many sections as are needed to show clearly the operation of the combustion unit. Show interior dimensions and features of the equipment necessary to calculate in performance.

*Standard Conditions: 70 F, 14.7 psia

ATTACHMENT D

TABLE 6
BOILERS AND HEATERS

Type of Device: Boiler		Manufacturer: Babcock and Wilcox			
Number from flow diagram:		Model Number:			
CHARACTERISTICS OF INPUT					
Type Fuel	Chemical Composition (% by Weight)(dry)	Inlet Air Temp °F (after preheat)		Fuel Flow Rate (scfm* or lb/hr) (dry)	
Coal	<u>Ultimate Analysis</u>	<u>Avg.</u>	<u>Max.</u>	Average	Design Maximum
	Carbon 78.00	585°F	651°F	261,100 lb/hr	437,500 lb/hr
	Hydrogen 4.86				
	Oxygen 18.51				
	Nitrogen .84				
	Sulphur .50				
	Ash 7.14				
	Chlorine .83				
	100.00				
	See Attachment "C" previously submitted	Gross Heating Value of Fuel(dry) (specify units)		Average	Design Maximum
		11,780 BTU/lb		3,623,000	4,681,000
HEAT TRANSFER MEDIUM					
Type Transfer Medium (Water, oil, etc.)	Temperature °F		Pressure (psia)		Flow Rate (specify units)
	Input	Output	Input	Output	Ave. Design_Max.
Water	(Max)	(Max)			60%
	(Water) 488°F	(G H Steam) 1005°F	2820 psia	2635 psia	2,100,000 lb/hr
OPERATING CHARACTERISTICS					
Ave. Fire Box Temp. at max. firing rate	Fire Box Volume (ft. ³), (from drawing)		Gas Velocity in Fire Box (ft/sec) at max firing rate		Residence Time in Fire Box at max firing rate (sec)
Approx. 2500 °F	434,000 ft. ³		51 ft/sec		Approx. 2 sec
STACK PARAMETERS					
Stack Diameters	Stack Height	Stack Gas Velocity (ft/sec)		Stack Gas Temp (°F)	
18 feet	241 feet (above ground elev. 240')	(@Ave. Fuel Flow Rate)	(@Max. Fuel Flow Rate)	275°	
		87 ft/sec	Design - 120 ft/sec		
CHARACTERISTICS OF OUTPUT					
Material	Chemical Composition of Exit Gas Released (% by Volume)				
CO ₂	12.4%				
H ₂ O	10.3%				
O ₂	3.3%				
N ₂	74.0%				
NO _x and SO ₂	See Attachment "C" previously submitted.				
Attach an explanation on how temperature, air flow rate, excess air or other operating variables are controlled.					

Also supply an assembly drawing, dimensioned and to scale, in plan, elevation, and as many sections as are needed to show clearly the operation of the combustion unit. Show interior dimensions and features of the equipment necessary to calculate its performance.

See Attachment "F" for additional information (6 pages)

* Standard Conditions: 70°F, 14.7 psia

SWEPCO 01659

4381

TABLE 6
BOILERS AND HEATERS

Type of Device: Boiler		Manufacturer: Unknown - parameters estimated				
Number from flow diagram:		Model Number:				
CHARACTERISTICS OF INPUT						
Type Fuel	Chemical Composition (% by Weight)	Inlet Air Temp °F (after preheat)		Fuel Flow Rate (scfm* or lb/hr)		
Coal see attach- ment "C" of Unit #1 application	<u>Ultimate Analysis</u>	<u>Avg.</u>	<u>Max.</u>	<u>Average</u>	<u>Design Maximum</u>	
	Carbon 70.00%	575°F	635°F	261,100 lb/hr	437,500 lb/hr (dry)	
	Hydrogen 4.86	Gross Heating Value of Fuel (specify units)		Total Air Supplied and Excess Air		
Oxygen 16.61						
	Nitrogen .86	11,780 BTU/lb		Average	Design Maximum	
	Sulfur .50			770,000 scfm*	1,000,265 scfm*	
	Ash 7.14	100.00%		see % excess addendum)	17 % excess (vol)	
	Chlorine .03					
HEAT TRANSFER MEDIUM						
Type Transfer Medium	Temperature °F		Pressure (psia)		Flow Rate (specify units)	
(Water, oil, etc.)	Input (max)	Output (max)	Input	Output	Average	Design Maximum
Water*	(water) 488°F	(SE steam) 1005°F	2820 psia	2635 psia	60% 2,100,000	3,793,000 lb/hr
OPERATING CHARACTERISTICS						
Ave. Fire Box Temp. at max. firing rate	Fire Box Volume (ft. ³) (from drawing)		Gas Velocity in Fire Box (ft/sec) at max firing rate		Residence Time in Fire Box at max firing rate (sec)	
Approx. 2500°F	434,000 ft ³		51 ft/sec		Approx. 2 sec	
STACK PARAMETERS						
Stack Diameters	Stack Height	Stack Gas Velocity (ft/sec)		Stack Gas	Exhaust	
rectangular 12 ft. x 18 ft.	300 feet (above ground elev. 240 MSL)	(@Ave. Fuel Flow Rate)	(@Max. Fuel Flow Rate)	Temp °F	scfm	
		87 ft/sec	135 ft/sec	275°F	1,255,978	
CHARACTERISTICS OF OUTPUT						
Material	Chemical Composition of Exit Gas Released (% by Volume)					
CO ₂	12.4					
H ₂ O	10.3					
O ₂	3.3					
N ₂	74.0					
NO _x and SO ₂	See attachment "C" (revised as of Nov. 18, 1975) of Unit #1 application					
Attach an explanation on how temperature, air flow rate, excess air or other operating variables are controlled.						

Also supply an assembly drawing, dimensioned and to scale, in plan, elevation, and as many sections as are needed to show clearly the operation of the combustion unit. Show interior dimensions and features of the equipment necessary to calculate in performance. See Attachment "F" of Unit #1 application

* Standard Conditions: 70°F, 14.7 psia

ATTACHMENT E

WST-10.90.10, 1994



Southwestern Electric Power Company

A Member of the Central and South West System

January 11, 1994

Executive Director
TNRCC, Air Division
12124 Park 35 Circle
Austin, Texas 78753

Attn: Combustion Division
Permit Applications

Executive Director:

In response to the TNRCC letter of October 7, 1994, please find enclosed Form PI-1R Permit Continuance Application for Southwestern Electric Power Company's Welsh Power Plant Unit #1, Permit No. 1166. SWERCO received the letter on October 11, 1993.

Additionally, please find enclosed check No.0045483 in the amount of \$10,000.00 to cover the continuance fee applicable to this renewal.

If you should have any questions concerning the enclosed application, please feel free to contact me at (318) 673-3848. Your assistance in the renewal of Permit No. 1166 is appreciated.

Sincerely,

Patrick Miller
Environmental Specialist

cc: Tyler, District V
Air Program Manager

WELSH POWER PLANT
SOUTHWESTERN ELECTRIC POWER COMPANY
TNRCC AIR DIVISION FORM PI-1R CONTINUANCE APPLICATION
PERMIT NO. 1166

JANUARY 10, 1993⁴

GENERAL

Welsh Power Plant is located in Titus County, northeast Texas about two miles northwest of Cason, Texas. Unit 1 has a design nameplate capacity of 557,735 kW. The date of commercial operation was March 31, 1977. The unit complies with the federal New Source Performance Standards (NSPS) for fossil-fired steam generators specified in 40 CFR Part 60, Subpart D.

The steam generating unit is a Babcock & Wilcox Company drum type, pulverized coal-fired unit with a continuous capacity of 3,793,000 lbs/hr of steam at 2620 psig and 1005 degrees F at the superheater outlet. Fuel for the boiler will be low sulfur sub-bituminous coal mined in Campbell County, Wyoming and transported to the plant site by railcar.

The boiler is designed to accommodate a maximum load of 625,000 lb/hr of coal. Based on a coal heat content typically around 8,250 Btu/lb, the maximum design heat input for the unit is 5,156 mmBtu/hr. This value will be used in order to appropriately calculate maximum emission rates in lbs/hr and tons/year. The sulfur content maximum, average and range for the low sulfur western coal is 0.50, 0.34 and 0.20 - 0.50 percent by weight, respectively. The average and range of coal heat value (Btu/lb) is 8,385 and 8,054 - 8,506, respectively.

Ignition Oil System - One 921,060 gal. fuel oil storage tank complete with two full capacity ignition oil pumps supply the unit with No. 2 Diesel Fuel. (~~Oil analyses attached~~): 140,000 Btu/gal. approx. The percent by weight sulfur content maximum, average and range for the No. 2 Fuel Oil is 0.50, 0.25 and 0.20 - 0.50, respectively.

The unit is designed with Low-NO_x technology, hot-side electrostatic precipitators (efficiency 99.6%) and low-sulfur (Avg. 0.35%) compliance coal which limits emissions to levels well below the current NSPS 40 CFR Part 60, Subpart D standards.

The remaining information for completion of this permit application can be found in Attachments A-I.



Central and South West Services, Inc.

1616 Woodall Rodgers Freeway
P.O. Box 660164 • Dallas, Texas 75266-0164
(214) 777-1000

February 27, 1997

Mr. James Crocker
Texas Natural Resource Conservation Commission
Office of Air Quality
New Source Review Division (MC-162)
12124 Park 35 Circle
Austin, Texas 78753

RE: Renewal, TNRCC Air Permit No.4379
Welsh Power Station, Unit 2 Boiler
TNRCC Account No. TF-0012-D

Dear Mr. Crocker,

Central and South West Services, Inc. (CSWS) respectfully submits the above referenced permit renewal application on behalf of Southwestern Electric Power Company Inc., a subsidiary of Central and South Corporation.

Should you have any questions regarding this submittal, please contact me at (214)777-1383.

Sincerely,

Patrick Blanchard
Project Administrator
CSWS Environmental Permitting & Remediation

Attachments

xc: Russ Draves, CSWS, Environmental Permitting & Remediation (w/attachments)
Brian Bond, CSWS, Environmental Services, Shreveport (w/attachments)
Jim Trimble, SWEPCO, Welsh Power Station (w/attachments)
Mike Clifton, SWEPCO, Welsh Power Station (w/attachments)
File WSH.10.90.50 (w/attachments)
Charles Murray, TNRCC Region 5 Air Program, Tyler

Process Description and Air Pollution Abatement Equipment

The Welsh Power Plant is located in Titus County, approximately two miles northwest of Cason, Texas. The facility is comprised of three coal fired units, each with a nameplate capacity of 558 MW.

Unit #2 is a Babcock & Wilcox Company, drum type, pulverized coal-fired boiler, with a continuous capacity of approximately 4,000,000 lb./hr of steam. Fuel for the boiler is sub-bituminous coal, transported to the plant site by railcar. The boiler is designed to accommodate an input of 5,156 mmBtu/hr or, 319 tons/hr of coal, based on a typical coal heat content of 8,250 Btu/lb. Boiler ignition is accomplished through the use of No. 2 fuel oil, supplied from a single 22,000 bbl. storage tank.

Coal is supplied to the six Unit 2 coal bunkers via the coal handling facilities authorized under TNRCC Permit Nos. 1576 and 4380. From these bunkers, coal is fed gravametricly to six feeders, which each in turn supplies an individual pulverizer. At the pulverizer, primary air is introduced and the fuel is pulverized. The pulverized coal is then transported by the primary air to the burners through a system of coal-air piping.

The boiler has a dry bottom from which ash falls to a water-filled ash hopper. Approximately 90% of this ash is hydraulically sluiced to an off site vendor for use as raw material. The remaining ash is hydraulically sluiced through discharge piping to a primary ash settling basin, where the majority of the insoluble suspended solids settle. Partially clarified effluent overflows to a secondary settling basin for additional clarification, and from which, effluent is discharged to the cooling lake.

Suspended fly ash in the combustion gases is controlled by an electrostatic precipitator that controls particulate emissions through electrostatic collection of charged particles. Combustion gasses, after passing through the precipitator are emitted to the atmosphere through a 360 foot rectangular stack.

Fly ash is collected in hoppers beneath the electrostatic precipitator and transported via vacuum pipeline in a dry state, to a storage silo. The fly ash is then transferred to covered trucks and transported off site. Emissions associated with the loading and unloading of the silo are controlled by a 99.8% efficient baghouse dust collection system, which returns collected ash to the silo.



Central and South West Services, Inc.

1616 Woodall Rodgers Freeway
Dallas, Texas 75202
P.O. Box 660164 • Dallas, Texas 75266-0164
214-777-1000

November 19, 1997

Texas Natural Resource Conservation Commission
Financial Division (MC-162)
P.O. Box 13088
Austin, Texas 78711-3088

RE: Renewal Fee (\$10,000)
Renewal, TNRCC Air Permit No.4381
Welsh Power Station, Unit 3 Boiler
TNRCC Account No. TF-0012-D

Central and South West Services, Inc. (CSWS) submits the above referenced permit renewal fee on behalf of West Texas Utilities Company Inc., a subsidiary of Central and South Corporation.

Should you have any questions regarding this submittal, please contact me at (214)777-1383.

Sincerely,

Patrick Blanchard
Project Administrator
CSWS Environmental Permitting & Remediation

Attachments

xc: Russ Draves, CSWS, Environmental Permitting & Remediation (w/attachments)
Jim Trimble, SWEPCO, Welsh Power Station (w/attachments)
Mike Clifton, SWEPCO, Welsh Power Station (w/attachments)
File WSH.10.90.50 (w/attachments)
Charles Murray, TNRCC Region 5 Air Program, Tyler (w/attachments)

Process Description and Air Pollution Abatement Equipment

The Welsh Power Plant is located in Titus County, approximately two miles northwest of Cason, Texas. The facility is comprised of three coal fired units, each with a nameplate capacity of 558 MW.

Unit #2 is a Babcock & Wilcox Company, drum type, pulverized coal-fired boiler, with a continuous capacity of approximately 4,000,000 lb./hr of steam. Fuel for the boiler is sub-bituminous coal, transported to the plant site by railcar. The boiler is designed to accommodate an input of 5,156 mmBtu/hr or, 319 tons/hr of coal, based on a typical coal heat content of 8,250 Btu/lb. Boiler ignition is accomplished through the use of No. 2 fuel oil, supplied from a single 22,000 bbl. storage tank.

Coal is supplied to the six Unit 2 coal bunkers via the coal handling facilities authorized under TNRCC Permit Nos. 1576 and 4380. From these bunkers, coal is fed gravimetricly to six feeders, which each in turn supplies an individual pulverizer. At the pulverizer, primary air is introduced and the fuel is pulverized. The pulverized coal is then transported by the primary air to the burners through a system of coal-air piping.

The boiler has a dry bottom from which ash falls to a water-filled ash hopper. Approximately 90% of this ash is hydraulically sluiced to an off site vendor for use as raw material. The remaining ash is hydraulically sluiced through discharge piping to a primary ash settling basin, where the majority of the insoluble suspended solids settle. Partially clarified effluent overflows to a secondary settling basin for additional clarification, and from which, effluent is discharged to the cooling lake.

Suspended fly ash in the combustion gases is controlled by an electrostatic precipitator that controls particulate emissions through electrostatic collection of charged particles. Combustion gasses, after passing through the precipitator are emitted to the atmosphere through a 360 foot rectangular stack.

Fly ash is collected in hoppers beneath the electrostatic precipitator and transported via vacuum pipeline in a dry state, to a storage silo. The fly ash is then transferred to covered trucks and transported off site. Emissions associated with the loading and unloading of the silo are controlled by a 99.8% efficient baghouse dust collection system, which returns collected ash to the silo.

*copy
from 98
renewal
app.*

Welsh Power Station Unit Three Emissions Calculations

Maximum Emissions Limitations							
<i>Pollutant</i>		<i>Boiler</i>				<i>Emissions</i>	
		<i>Requirement</i>		<i>Emission Factor</i>		<i>lb/hr</i>	<i>Ton/yr.</i>
		Representations				Limitations	
NO _x	(Oxides of Nitrogen)	5156	MMBtu/Hr ¹	0.7	lb/MMBtu ³	3,609	15,808
CO	(Carbon Monoxide)	312.5	Tons coal/Hr ²	0.5	Lb/Ton ⁴	156	684
VOC	(Volatile Organic Compounds)	312.5	Tons coal/Hr ²	0.06	lb/Ton ⁴	19	82
SO ₂	(Sulfur Dioxide)	5156	MMBtu/Hr ¹	1.12	lb/MMBtu ⁵	5,771	25,277
PM	(Particulate Matter)	5156	MMBtu/Hr ¹	0.069	lb/MMBtu ⁵	358	1,569

Notes

¹Boiler design specification of 625,000 lb/hr coal feed rate, and with a typical fuel heat content of 8,250 Btu/lb = 5156 MMBtu/hr

²625,000lbs/hr coal / 2,000lbs/ton

⁵NSPS Subpart D 40 CFR 60.44(a)(3)

⁴AP-42 Table 1.1-11

⁵USEPA PSD PERMIT



Central and South West Services, Inc.

1616 Woodall Rodgers Freeway
Dallas, Texas 75202
P.O. Box 660164 • Dallas, Texas 75266-0164
214-777-1000

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 11, 1998

Ms. Ozden Tamer, Ph.D.
Office of Air Quality
New Source Review Permits Division (MC-162)
Texas Natural Resource Conservation Commission
P.O. Box 13087
Austin, Texas 78711-3087

RE: Notice of Deficiency Reply
Permit Renewal
Permit No. 4381
Welsh Power Plant Unit #3
Pittsburg, Titus County
Account No. TF-0012-D

RECEIVED
MAR 12 1998

PERMITS PROGRAM

Dear Ms. Tamer:

On behalf of Southwestern Electric Power Company (SWEPCO) and Welsh, Central and South West Services, Inc (CSWS), is submitting the additional information that you requested in your letter dated 2/23/98 to allow the continued review of the permit renewal.

1. The differences between maximum fuel flow rate and coal heating values represented in the initial construction application and the renewal application are because the coal's heating value is given on a dry basis in the construction application and on an as received basis in the renewal application. The coal has an average moisture content of 30%. The as received coal values were represented to the Texas Air Control Board (TACB) on September 11, 1980 in a memo to Mr. Jerry M. Demo P.E.
2. The use of lower emission factors for carbon monoxide (CO) and volatile organic compounds (VOCs) is attributed to revisions of AP-42, but we do not reject to using

the older emission factors in determining maximum allowable emissions. No revision to the "Introduction" section of the permit renewal application is required since there have been no modifications to this unit.

3. The emission factors used in the renewal application yield emission estimates which are higher than those shown by actual testing and CEM data.
4. The coal input has been corrected to 312.5 tons/hr in the "Process Description and Air Pollution Abatement Equipment" section.

Pursuant to our conversation on March 9, 1998, I have also included seven days of SO₂ and NO_x CEM data collected from Unit 3. The data is given in hourly averages. I also included Unit 3 1997 emissions reported to EPA in accordance with 40 CFR Part 75.

In the future to allow for a timely response to requests, correspondence regarding this permit renewal should be addressed to Mr. Kris Gaus (N6ENV), Project Administrator, P.O. Box 660164, Dallas, TX 75266-0164

Should you have any questions, please contact me at (214)777-2896 or kgaus@csww.com.

Sincerely,



Kris Gaus
Project Administrator
Environmental Permitting & Remediation

Attachments

cc: Russ Draves CSWS Environmental Permitting & Remediation (w/o attachments)
Jim Trimble SWEPCO, Welsh Power Station (w/attachments)
Mike Clifton, SWEPCO, Welsh Power Station (w/attachments)
File WSH.10.90.50

"Date",	Time	Average'SO2", (lbs/hr)	Average NOx" (lbs/MMBtu)
3/2/98	00:00,	2243.1,	0.314
3/2/98	01:00,	1977.9,	0.279
3/2/98	02:00,	2439.0,	0.274
3/2/98	03:00,	3466.3,	0.298
3/2/98	04:00,	3684.5,	0.34
3/2/98	05:00,	3628.6,	0.359
3/2/98	06:00,	3455.9,	0.394
3/2/98	07:00,	3470.3,	0.395
3/2/98	08:00,	3479.2,	0.402
3/2/98	09:00,	3449.5,	0.396
3/2/98	10:00,	3406.8,	0.396
3/2/98	11:00,	3379.0,	0.402
3/2/98	12:00,	3232.6,	0.41
3/2/98	13:00,	3278.0,	0.403
3/2/98	14:00,	3246.2,	0.411
3/2/98	15:00,	3205.5,	0.409
3/2/98	16:00,	3203.4,	0.416
3/2/98	17:00,	3248.0,	0.406
3/2/98	18:00,	3250.2,	0.404
3/2/98	19:00,	3297.8,	0.407
3/2/98	20:00,	3281.2,	0.417
3/2/98	21:00,	3319.7,	0.413
3/2/98	22:00,	3363.6,	0.404
3/2/98	23:00,	3352.8,	0.4
3/3/98	00:00,	2687.9,	0.38
3/3/98	01:00,	1585.8,	0.319
3/3/98	02:00,	1485.5,	0.302
3/3/98	03:00,	1541.0,	0.287
3/3/98	04:00,	1788.3,	0.269
3/3/98	05:00,	2647.5,	0.29
3/3/98	06:00,	2959.0,	0.352
3/3/98	07:00,	3133.1,	0.372
3/3/98	08:00,	3622.3,	0.388
3/3/98	09:00,	3964.7,	0.402
3/3/98	10:00,	4093.8,	0.406
3/3/98	11:00,	4171.9,	0.417
3/3/98	12:00,	4121.4,	0.435
3/3/98	13:00,	4005.7,	0.435
3/3/98	14:00,	4049.8,	0.437
3/3/98	15:00,	4073.6,	0.43
3/3/98	16:00,	4130.8,	0.441
3/3/98	17:00,	3967.5,	0.442
3/3/98	18:00,	3850.4,	0.444
3/3/98	19:00,	3836.4,	0.434
3/3/98	20:00,	3695.7,	0.42
3/3/98	21:00,	3559.2,	0.411
3/3/98	22:00,	3580.3,	0.417

ATTACHMENT F

Summary of Permit Application Coal Information for Welsh Power Plant Units 1-3

Reference Document No.	Coal Wt%S	Coal Btu/lb	Coal feed rate (Lb/hr)	Calculated Performance Standard (lbs SO2 per MMBtu)	Unit no.	Current Permit Performance Standard (lbs SO2 per MMBtu)	Document Description	Document Date
1	0.5% dry	11,780	437,500	0.85	1	1.2	Unit 1 original permit application, Table 6	6/25/73
2	0.5% dry	11,780	437,500	0.85	3	1.12	Unit 3 original application, Permit 4381, Refers to unit 1 application 6/25/73 and provides identical Table 6	5/19/76
3	0.48% wet @ 32% moisture	8455	633,000	1.13	1-3	1.1 to 1.2	Report SL-3265 Impact of PSD regulations on Welsh Units 1-3, Executive Summary, representative coal analysis	6/26/76
4	0.5%	8,506	625,000	1.17	1	1.2	Unit 1 Continuance application, Permit no. 1166, General Discussion	1/10/94
5	0.5%	8,250	625,000	1.21	2	1.1	Unit 2 Renewal application, Permit 4379, Table 6	2/27/97
6	0.5%	8,250	625,000	1.21	3	1.12	Unit 3 Renewal application, Table 6	11/19/97

5153.75
 5153.75
 5352.01
 5376.21
 5156.15

**Calculations of Performance Standard (lb SO₂/MMBtu)
Based on Document Data**

i. Documents 1 and 2 referenced in the prior table provide Table 6s with the following coal data:

0.5 weight % sulfur and 11780 Btu/lb of coal

$$(0.005 \text{ lb of S/lb of coal}) / (11780 \text{ Btu/lb of coal}) \times (64 \text{ lb of SO}_2 / 32 \text{ lb of S}) \times (1,000,000 \text{ Btu/MMBtu}) \\ = 0.85 \text{ lb SO}_2 / \text{MMBtu}$$

ii. Document 3 provides the following maximum data for the representative coal:
0.48 weight % sulfur and 8455 Btu/lb of coal

$$(0.0048 \text{ lb of S/lb of coal}) / (8455 \text{ Btu/lb of coal}) \times (64 \text{ lb of SO}_2 / 32 \text{ lb of S}) \times (1,000,000 \text{ Btu/MMBtu}) \\ = 1.13 \text{ lb SO}_2 / \text{MMBtu}$$

iii. Document 4 provides the following data for the coal in the general discussion:
0.5 weight % sulfur and 8506 Btu/lb of coal

$$(0.005 \text{ lb of S/lb of coal}) / (8506 \text{ Btu/lb of coal}) \times (64 \text{ lb of SO}_2 / 32 \text{ lb of S}) \times (1,000,000 \text{ Btu/MMBtu}) \\ = 1.17 \text{ lb SO}_2 / \text{MMBtu}$$

Documents 5 and 6 provide Table 6s with the following data for the coal:
0.5 weight % sulfur and 8250 Btu/lb of coal

$$(0.005 \text{ lb of S/lb of coal}) / (8250 \text{ Btu/lb of coal}) \times (64 \text{ lb of SO}_2 / 32 \text{ lb of S}) \times (1,000,000 \text{ Btu/MMBtu}) \\ = 1.21 \text{ lb SO}_2 / \text{MMBtu}$$

ATTACHMENT G



American Electric Power
P.O. Box 860164
Dallas, TX 75286-0164
aep.com

August 6, 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED 7002 2410 0006 6799 9284

Texas Commission on Environmental Quality
Air Permits Division, MC-162
Attn: Mr. Erik Hendrickson
P. O. Box 13087
Austin, TX 78711-3087

Re: Permit Alteration
Southwestern Electric Power Co.
Welsh Power Station
Permit 4381/PSD-TX-3
Account # TF-0012-D
RN 100213370

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AIR PERMITS DIVISION

Dear Mr. Hendrickson:

Southwestern Electric Power Company (SWEPCO) requests permit alterations for the above referenced air permit. The following alterations are requested:

1. SWEPCO requests that the parenthetical references to design heat input and nameplate generator rating be removed from special conditions 2, 3 and 4. Such special conditions reference the three units' full load operating condition as 5,156 MMBtu/hr heat input and 558 MW nameplate generator rating. These values, however, do not represent, and were never intended to represent, the full load condition of any of the units; instead, they are the design values provided by the respective boiler and turbine manufacturers and are in the nature of the minimum values that the manufacturers guarantee that the units can achieve. Both can vary depending on a number of external factors including fuel characteristics, equipment condition, ambient temperatures or other weather conditions. A review of units' operating data will confirm that the units have operated in a range around the specified heat input design value and nameplate generator rating ever since their initial start-ups.

The nameplate generator rating (in MW) was not used in any way to calculate any of the mass emissions limits. Although the heat input design value may have been used to calculate the hourly and annual mass emission limits for some air contaminants that are contained in the 1998 renewed permit, so long as the units can maintain compliance with the applicable emission limits within the range of the unit's normal operations, there is no need for the permit to impose an additional operational restriction on the units.

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Continuous emission monitors (CEMS) for NO_x and SO₂ measure and record the units' NO_x and SO₂ emission rates, and stack testing for PM was recently conducted. The CEMS and stack testing results confirm that the applicable emissions limits for these air contaminants are not exceeded when the units operate at full load. Revised CO emission limits were previously authorized by the TCEQ in connection with SWEPCO's pollution control project standard permit that authorized the installation of additional NO_x control equipment on Units 1 and 3. Performance stack testing, which was conducted for CO and VOCs following the installation of the additional NO_x control equipment on Units 1 and 3, confirmed that the units comply with the applicable CO and VOCs emissions limits. The pollution control project standard permit will also be used to authorize the installation of additional NO_x controls on Unit 2 (currently scheduled for the Spring of 2005) and associated revisions to the CO emissions limits for Unit 2.

In addition to the removal of the parenthetical references to the design heat input value and nameplate generator rating from the permit, and for the same reasons, SWEPCO requests that the language in special condition 2 be altered by eliminating the last sentence of that condition from the permit. SWEPCO also requests that language be inserted in special condition 16 to preserve the practice of utilizing the higher heating value of the fuel to determine fuel firing rates from fuel quality data, and maintain the current recordkeeping requirements for this information.

These requested permit alterations will merely clarify and correct the existing language in the permit. None of them will affect the actual emission rates or the applicable mass emission limits of any of the air contaminants listed in the Table 1 of the permit, nor will they change normal unit operations.

2. SWEPCO requests that special conditions 6A and 6B be altered by removing the references to a specific sulfur content limit on the coal and fuel oil fired in the units. Monitoring the sulfur content of the coal and fuel oil is unnecessary since all the units are equipped with a SO₂ CEMS and SO₂ emissions are adequately limited by the existing pound per million Btu and/or pound per hour SO₂ emission limitations in the permit.
3. SWEPCO requests that the requirement to maintain records of the sulfur content of fuel oil be removed from special condition 17 of the permit. Since each unit is equipped with a SO₂ CEMS, the recordkeeping required by this special condition is not needed.
4. SWEPCO requests that special condition 15 be removed from the permit. Special condition 10 already requires SWEPCO to maintain continuous emission monitoring records for SO₂ emissions during all periods of operation utilizing the data recorded by the Part 75 monitors.
5. SWEPCO requests that clarifying language be added to Table 1 by inserting after the "PM" in third column of the entry for each of Units 1, 2, or 3, the parenthetical phrase "(front half only)." This phrase is consistent with TCEQ-approved stack testing protocols for the units, including those used in the most recent tests at the Welsh Plant, and similar clarifying language currently appears in Permit No. 9015 for the Oklaunion generating unit.

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Copies of the relevant pages of Permit No. 4381 and PSD-TX-3 are enclosed that reflect the requested alterations. No other portions of the permit will be affected. The requested permit alterations do not interfere with any prior best available technology demonstration, as all existing emission limitations will be preserved. The permit alterations also do not cause a change in the method of control of emissions, a change in the character of emissions, or an increase in the emission rate of any air contaminant. To the extent any of the requested permit alterations would be inconsistent with any statement or representation in any application forms or other documents currently on file with the TCEQ that comprise the "permit application", the requested permit alterations supersede any such statement or representation.

Please contact me at (214) 777-2896 or email me at kpgaus@aep.com with any questions.

Sincerely,



Kris Gaus, QEP
Environmental Specialist
Air Quality Services

cc: Leroy Biggers , TCEQ Region 5, (w/att)

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SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. The annual rates are based on a rolling 12-month period.

If one emission rate limitation should be more stringent than another emission rate limitation, the more stringent limitation shall govern and be the standard by which compliance will be determined.

2. Sulfur dioxide (SO₂) emissions from the stack of the Unit 1 Boiler, designated as Emission Point No. (EPN) 1, shall not exceed 1.2 lb/MMBtu while firing at full load (~~5,156 MMBtu/hr, Nameplate Capacity: 558 MW~~). ~~The heat input limit is based upon higher heating value of the fuel.~~
3. Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), SO₂, particulate matter (PM), and volatile organic compounds (VOC) from the stack of the Unit 2 Boiler, designated as EPN 2, shall not exceed the following limits while firing at full load (~~5,156 MMBtu/hr, Nameplate Capacity: 558 MW~~):

Pollutant	Emissions
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.085 lb/MMBtu (3-hr rolling average)
SO ₂	1.1 lb/MMBtu (3-hr rolling average)
PM	0.075 lb/MMBtu (3-hr rolling average)
VOC	0.073 lb/MMBtu (3-hr rolling average)

4. Emissions of NO_x, CO, SO₂, PM, and VOC from the stack of the Unit 3 Boiler, designated as EPN 3, shall not exceed the following limits while firing at full load (~~5,156 MMBtu/hr, Nameplate Capacity: 558 MW~~):

Pollutant	Emissions
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.0303 lb/MMBtu (3-hr rolling average)
SO ₂	1.12 lb/MMBtu (3-hr rolling average)
PM	0.069 lb/MMBtu (3-hr rolling average)
VOC	0.0036 lb/MMBtu (3-hr rolling average)

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SPECIAL CONDITIONS
Permit Nos. 4381 and PSD-TX-3
Page 2

- 5. Opacity of emissions from the Unit 1 Boiler stack (EPN Boiler 1), Unit 2 Boiler stack (EPN Boiler 2), and Unit 3 Boiler stack (EPN Boiler 3) must not exceed 20 percent averaged over a six-minute period, except for those periods described in Texas Natural Resource Conservation Commission (TNRCC) 30 TAC Section 111.111(a)(1)(E) of Regulation I.
- 6. Fuels used in the Unit 1, 2, and 3 Boilers shall be limited to the following:
 - A. Sub-bituminous coal containing no more than ~~0.5~~ percent total sulfur by weight.
 - B. No. 2 fuel oil containing no more than 0.5 percent total sulfur by weight.
 The use of any other fuel will require a modification to this permit.

FEDERAL REQUIREMENTS

- 7. The sources covered under this permit shall comply with the requirements of Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources promulgated for Fossil Fuel-Fired Steam Generators in Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subparts A and D including the applicable test methods and procedures specified in 40 CFR 60.46. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit condition shall govern and be the standard by which compliance shall be demonstrated.

COMPLIANCE TESTING

- 8. For Unit 1 and Unit 2 Boilers, initial compliance testing for PM, SO₂, NO_x, and opacity was completed on July 15 through 18, 1980. Initial compliance testing has not been performed for Unit 3 Boiler based on the fact that this boiler is very similar in design and operation to the Unit 1 and Unit 2 Boilers. Additional testing shall be performed for all three boilers when required by the Executive Director of the TNRCC.

CONTINUOUS DETERMINATION OF COMPLIANCE

- 9. In order to demonstrate continuous compliance with the opacity limit of Special Condition No. 5, the holder of this permit shall operate and maintain a certified continuous emission monitoring system for measuring opacity of emissions.

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SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 3

10. In order to demonstrate continuous compliance with the SO₂ emission limit as stated in Special Condition Nos. 2, 3, and 4, the holder of this permit shall measure and record SO₂ emissions using one of the methods specified in 40 CFR 75.11(a).
11. Data from the continuous emission monitors for flow, SO₂, NO_x, CO₂, and continuous opacity monitors required by 40 CFR 60 and 40 CFR 75 may be used to determine compliance with the conditions of this permit.

ASH HANDLING

12. Emissions from the fly ash silo vents shall be controlled with Baghouses (EPN-7, EPN-8, and EPN-9).
13. Emissions from fly ash loading into trucks from the fly ash silos shall be controlled by venting the displaced air through the Silo Baghouses (EPN Ash 1, EPN Ash 2, and EPN Ash 3).

RECORDKEEPING

14. For all emission sources covered under this permit, all emission records and all continuous monitor measurements, including monitor performance testing measurements, all monitor calibration checks and adjustments, and maintenance performed on these systems must be retained for at least five years and must be made available upon request to the Executive Director or any agent of the TNRCC.
15. ~~For Unit 1, 2, and 3 Boilers, the permittee shall maintain records of monitoring data for three-hour rolling average of SO₂ emissions in lb/MMBtu of heat input, during periods of oil firing. These records shall be made available to the TNRCC Executive Director or the designated representative upon request.~~
16. The holder of this permit shall retain records of the average fuel-firing rate, in units of tons of coal per hour and million British thermal units per hour (MMBtu/hr) for a minimum of two years from the date of recording. The average fuel firing rate, in units of tons of coal per hour and MMBtu/hr, shall be calculated at least monthly. This information may be used to determine compliance with the emissions limitations of Special Condition No. 1.

The average fuel-firing rate shall be based on the higher heating value of the fuel.

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SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 4

17. The firing rate (MMBtu/hr) of fuel oil shall be recorded for each 24-hour time period of fuel oil firing, along with the date, time, and duration of fuel oil firing. The quantity, higher heating value, ^{Btu/gal} grade(s), and percent sulfur content (by weight) of the fuel oil fired shall be clearly noted for each occurrence. This data shall be maintained in a permanent form suitable for inspection.
18. The holder of this permit shall retain records of the electric power generating rate in Unit 1, 2, and 3 Boilers in units of megawatts, for a minimum of two years from the date of recording.
19. The holder of this permit shall comply with the applicable recordkeeping requirements of 40 CFR 60.7; 40 CFR 60.45g, and 40 CFR 75.

REPORTING

20. The holder of this permit shall comply with the applicable reporting requirements of 40 CFR 60.7, 40 CFR 60.45g, and 40 CFR 75.
21. If the electric power generation of the Unit 1 and 2 Boiler exceeds, by more than 10 percent, the electric power (in megawatts) maintained during initial compliance testing, the company must notify, in writing, the Executive Director of the TNRCC; and the source may be subject to additional sampling to demonstrate continued compliance with all applicable state and federal regulations.

ADDITIONAL CONDITIONS

22. The evaporation of nonhazardous turbine cleaning waste is authorized in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
 - A. Injection rate shall not exceed 5 gal/min,
 - B. The approximate quantity of turbine cleaning fluid evaporated in Unit 2 Boiler will be 8,100 gallons for the 27 hour boiler evaporation operation,
 - C. Total emissions for all air contaminants during this evaporation procedure shall not exceed 1.73 pounds/hr and 0.0234 ton/year.

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SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 5

23. The evaporation of nonhazardous boiler cleaning waste generated as the result of periodic cleaning (once every six to eight years) of Unit 1, 2, and 3 Boilers located at Southwestern Electric Power Company's Wilkes Power Plant is authorized in Unit 1 Boiler of Welsh Power Plant with the following limitations:
- A. The injection rate of the boiler cleaning waste shall be at the maximum rate of 50 gallons per minute until all of the cleaning waste is evaporated,
 - B. The quantity of boiler cleaning waste transported from the Wilkes Power Plant to the Welsh Power Plant to be burned in the Unit 1 Boiler will be approximately 65,000 gallons.
24. The permittee is authorized to burn spent activated carbon generated every two years from the Welsh Power Plant's water treatment system in Unit 1, 2, and 3 Boiler, after it is blended with coal, with the following limitations:
- A. Maximum feed rate shall not exceed 1,712 pounds/hr,
 - B. The quantity of spent activated carbon to be burned in the boilers will be approximately 33,000 pounds for the 20 hours burn operation.
25. The permittee is authorized to evaporate ammoniated citric acid cleaning solution per each boiler cleaning episode in Unit 1, 2, and 3 Boilers of the Welsh Power Plant by injection with the following limitations:
- A. The injection rate of the cleaning solution shall not exceed 50 gallons per minute,
 - B. The quantity of cleaning solution to be evaporated in the boilers will be approximately 140,000 gallons.
26. The permittee is authorized to evaporate spent boiler cleaning solution generated from cleaning of Unit 3 Boiler in Unit 2 Boiler of the Welsh Power Plant with the following limitations:
- A. The maximum evaporation rate is 27 gallons per minute,
 - B. The quantity of spent boiler cleaning solution to be evaporated in Unit 2 Boiler will be approximately 180,000 gallons.
 - C. Evaporation procedure will be conducted once every six to eight years.

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SPECIAL CONDITIONS

Permit Nos. 4381 and PSD-TX-3

Page 6

27. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TNRCC or any local air pollution control agency having jurisdiction.
28. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
- A. The facility identification numbers as submitted to the Emission Inventory Section of the TNRCC.
 - B. The EPNs as listed on the maximum allowable emission rates table.
29. Upon request by the Executive Director of the TNRCC or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sampling and/or analysis of the fuel(s) utilized in the boiler or shall allow the TNRCC or any other air pollution control agency representatives to obtain a sample for analysis.

Dated September 10, 1998

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March 8, 2007

VIA OVERNIGHT MAIL



Richard Hyde
Director of Air Permits Division
Texas Commission on Environmental Quality
Air Permits Division, MC-162
P. O. Box 13087
Austin, TX 78711-3087

AIR PERMITS DIVISION

MAR 09 2007

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Re: Revised and replacement permit alteration request
Southwestern Electric Power Company
Welsh Power Station
Permit 4381/PSD-TX-3
Account # TF-0012-D
CN600126767, RN 100213370

Dear Mr. Hyde:

By letter dated August 6, 2004, Southwestern Electric Power Company (SWEPCO) requested several permit alterations. By this letter, SWEPCO is revising that permit alteration request letter such that the only permit alterations SWEPCO is now requesting are those discussed in the three numbered paragraphs below. Based on ongoing discussions with the TCEQ, SWEPCO may later submit a letter requesting additional permit alterations, including one or more of the alterations that SWEPCO requested in its August 6, 2004 permit alteration request letter.

1. For the reasons SWEPCO presented in the August 6, 2004 permit alteration request letter and at other times (such as during the February 13, 2007 meeting with you and other TCEQ personnel), SWEPCO requests that the TCEQ clarify the above-referenced permit to delete (i) the parenthetical language in Special Conditions 2, 3, and 4 that contains references to the design heat input of 5,156 MMBtu/hr and the nameplate generator capacity of 558 MW, and (ii) the last sentence of Special Condition 2.
2. SWEPCO requests that Special Condition 6.A. be altered to clarify that the 0.5% sulfur limit for the coal is on a "wet (as received) basis". (In the August 6, 2004 permit alteration request letter, SWEPCO asked that the 0.5% sulfur limit be deleted.)
3. SWEPCO requests that a special condition be added to the permit to require that stack testing be conducted for PM, CO, and VOCs once prior to the current expiration date of the permit, and once every third year thereafter.

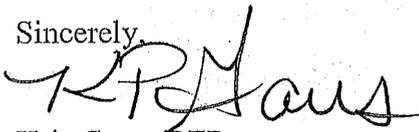
Richard Hyde
March 8, 2007
Page 2

Enclosed is a proposed redlined version of the permit special conditions that SWEPCO is requesting be altered.

None of the requested permit alterations will interfere with any prior best available control technology demonstration under 30 TAC 116.111(a)(2)(C). To the extent any of the requested permit alterations would be inconsistent with any statement or representation in any of the application forms or documents that comprise the "permit application" for the above-referenced permit, the requested permit alterations supersede any such statement or representation.

SWEPCO would appreciate prompt processing of the requested permit alterations. Please contact me at (214) 777-1113 or email me at kpgaus@aep.com with any questions.

Sincerely,



Kris Gaus, QEP
Environmental Specialist
Air Quality Services

Proposed altered conditions of Permit Nos. 4381/PSD-TX-3

...

2. Sulfur dioxide (SO₂) emissions from the stack of the Unit 1 Boiler, designated as Emission Point No. (EPN) 1, shall not exceed 1.2 lb/MMBtu while firing at full load (5,156 MMBtu/hr, Nameplate Capacity: 558 MW). The heat input limit is based upon higher heating value of the fuel.
3. Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), SO₂, particulate matter (PM) (Front Half Only), and volatile organic compounds (VOC) from the stack of the Unit 2 Boiler, designated as EPN 2, shall not exceed the following limits while firing at full load (5,156 MMBtu/hr, Nameplate Capacity: 558 MW):

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.085 lb/MMBtu (3-hr rolling average)
SO ₂	1.1 lb/MMBtu (3-hr rolling average)
PM	0.075 lb/MMBtu (3-hr rolling average)
VOC	0.073 lb/MMBtu (3-hr rolling average)

4. Emissions of NO_x, CO, SO₂, PM (Front Half Only), and VOC from the stack of the Unit 3 Boiler, designated as EPN 3, shall not exceed the following limits while firing at full load (5,156 MMBtu/hr, Nameplate Capacity: 558 MW):

<u>Pollutant</u>	<u>Emissions</u>
NO _x	0.7 lb/MMBtu (3-hr rolling average)
CO	0.0303 lb/MMBtu (3-hr rolling average)
SO ₂	1.12 lb/MMBtu (3-hr rolling average)
PM	0.069 lb/MMBtu (3-hr rolling average)
VOC	0.0036 lb/MMBtu (3-hr rolling average)

...

6. Fuels used in the Unit 1, 2, and 3 Boilers shall be limited to the following:
 - A. Sub-bituminous coal containing no more than 0.5 percent total sulfur by weight on a wet (as received) basis.
 - B. No. 2 fuel oil.

The use of any other fuel will require a modification to this permit.

...

#?. The holder of this permit shall perform stack sampling once prior to the expiration date of this permit, and once every third year thereafter as specified in Paragraph C below, to establish the actual quantities of particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC) being emitted into the atmosphere from the Unit 1, 2, and 3 Boilers (EPN-1, EPN-2, and EPN-3). The purpose of such sampling will be to determine compliance with the PM, CO, and VOC emissions limits in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and of applicable test methods.

The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

A. The TCEQ Tyler Regional Office shall be contacted soon after testing is scheduled, but not less than 30 days prior to sampling, to schedule a pretest meeting. The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling is scheduled to occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director or the TCEQ Austin Compliance Support Division shall approve or disapprove of any deviation from specified sampling procedures.

B. Each boiler shall be tested at full load for the atmospheric and operational conditions which exist during testing.

C. Sampling as required by this condition shall be conducted at any time between the first day of March and the last day of October. Additional sampling may be required by the TCEQ or EPA.

D. Within 90 days after the completion of sampling required herein, three copies of the sampling reports shall be distributed as follows:

One copy to the EPA Region 6 Office, Dallas.
One copy to the TCEQ Tyler Regional Office.
One copy to the TCEQ Austin Compliance Support Division.

E. Sampling reports shall comply with the conditions of Chapter 14 of the TCEQ Sampling Procedures Manual. Information in the stack sampling report shall include (at a minimum) the following data for each test run:

- (1) hourly coal firing rate (in tons);
- (2) average coal Btu/lb, expressed both on an as-burned basis and a dry basis;
- (3) average steam generation rate in millions of pounds per hour;
- (4) average generator output in MW;
- (5) control device operating parameters;
- (6) emissions in the units of the limits of this permit, lb/hr and lb/MMBtu; and
- (7) any additional records deemed necessary during the stack sampling pre-test meeting.

F. A complete copy of the sampling reports required by this permit condition shall be kept at the plant for the life of the permit. Sampling reports shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.