

TCEQ DOCKET No. 2007-0598-AIR

RE: PERMIT ALTERATION § **BEFORE THE** 2007 MAY 16 PM 2:13
PERMIT NO. 4381/PSD-TX-3 § **TEXAS COMMISSION** CHIEF CLERKS OFFICE
WELSH POWER STATION § **ENVIRONMENTAL QUALITY**

**SOUTHWESTERN ELECTRIC POWER COMPANY'S BRIEF IN RESPONSE TO
MOTION TO OVERTURN**

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY:

COMES NOW Southwestern Electric Power Company ("SWEPCO")¹ and respectfully requests that the Texas Commission on Environmental Quality ("Commission" or "TCEQ") deny the Sierra Club and Public Citizen's ("Movant's")² Motion to Overturn ("Motion") the Executive Director's March 20, 2007 issuance of permit alterations to Permit No. 4381/PSD-TX-3.

I. BACKGROUND

On August 6, 2004, SWEPCO submitted a letter to the TCEQ requesting that Permit No. 4381/PSD-TX-3 for SWEPCO's Welsh Plant be altered to, among other things, delete the references to heat input in Special Conditions 2-4 and the 0.5% coal sulfur limit in Special Condition 6. (Exhibit 1 contains the pages from the August 6, 2004 submittal that shows the alterations SWEPCO was requesting to Special Conditions 2-4 and 6.) SWEPCO's purpose for requesting those alterations was to clarify certain ambiguities with respect to the references to heat input of 5,156 MMBtu/hr in Special Conditions 2-4 and the 0.5% coal sulfur limit in Special Condition 6. Such clarifications were needed because the apparent ambiguous language in

¹ In their Motion to Overturn, Movants refer to "American Electric Power Company", rather than "Southwestern Electric Power Company", which is the holder of Permit No. 4381/PSD-TX-3. Southwestern Electric Power Company is a wholly owned, separately incorporated subsidiary of AEP Utilities, Inc, which is a wholly owned, separately incorporated subsidiary of American Electric Power Company.

² Sierra Club and Public Citizen are the plaintiffs in a citizen suit against Southwestern Electric Power Company and American Electric Power Company, styled Public Citizen, et. al., v. American Electric Power Company, et. al.

Special Conditions 2-4 and 6 was the basis for a Notice of Enforcement (“NOE”) issued on July 19, 2004, alleging that SWEPCO had violated its permit by allowing the heat input to the units to exceed 5,156 MMBtu/hr and the sulfur content of the coal to exceed 0.5% on a “dry” basis.

SWEPCO initially responded to those allegations by letter dated September 15, 2004. On April 11, 2005, the Executive Director issued its Preliminary Report and Petition (“EDPRP”) recommending formal enforcement and the assessment of a civil penalty. SWEPCO met with the TCEQ Air Permits and Enforcement Division staff personnel on July 27, 2005 to present to and discuss with them additional information supporting SWEPCO’s position that the references to 5,156 MMBtu/hr in Special Conditions 2-4 and the prior permit applications do not constitute limits on the heat input to the units. Subsequent to that meeting, a TCEQ Executive Director staff member handling the enforcement case told SWEPCO representatives on multiple occasions (including on February 23, 2006 and April 10, 2006) that the Executive Director had decided not to pursue enforcement of the heat input allegation in the NOE because he had determined that it was not a violation for the units' heat inputs to exceed the references to 5,156 MMBtu/hr that were in Special Conditions 2-4 and in the permit applications.

SWEPCO subsequently discovered additional information supporting its position that the 0.5% coal sulfur limit in Special Condition 6 was, and has always been, intended to be measured and applied on a “wet basis” (rather than a "dry basis"). In a February 13, 2007 meeting with senior TCEQ Air Permits Division staff (including the Air Permits Division Director), SWEPCO presented and discussed that information, as well as the information presented to the TCEQ staff on July 27, 2005 supporting SWEPCO's position that the references to 5,156 MMBtu/hr that were in Special Conditions 2-4 and in the permit applications were not limits on the heat input to the units. SWEPCO also asserted that it was appropriate for the TCEQ to use a permit alteration to delete the references to 5,156 MMBtu/hr from Special Conditions 2-4, and to add language to Special Condition 6 clarifying that the 0.5% coal sulfur limit is applied on a “wet basis.”

As Movants state in their Motion, they raised their concerns about the requested permit alterations in a September 23, 2005 letter to the Executive Director. (Exhibit 2) Based on conversations with TCEQ personnel, it is SWEPCO's understanding that Movants also discussed their concerns with TCEQ personnel. The Executive Director considered Movants' concerns

about the requested permit alterations as part of his decision regarding the requested alterations, and responded in the manner Movants suggested regarding possible options to address the requested heat input and percent sulfur alterations.

Because SWEPCO's original August 6, 2004 permit alteration request letter requested that the 0.5% coal sulfur limit in Special Condition 6 be deleted, rather than revised to clarify it is applied on a "wet basis", SWEPCO submitted a letter on March 8, 2007 that revised its August 6, 2004 permit alteration request letter to, among other things, request that Special Condition 6 be altered to clarify that the 0.5% coal sulfur limit is applied on a "wet basis," rather than that such limit be deleted entirely. (Exhibit 3) The March 8, 2007 letter also requested that the references to heat input in Special Conditions 2-4 be deleted and that a special condition be added to the permit to require SWEPCO to conduct stack testing to measure emissions of particulate matter ("PM"), carbon monoxide ("CO"), and volatile organic compounds ("VOCs") once before the expiration of the current permit, and once every third year thereafter.³ (*Id.*)

In response to the March 8, 2007 letter, the Executive Director sent SWEPCO a March 20, 2007 letter that altered Permit No. 4381/PSD-TX-3 to, among other things, delete the references to heat input in Special Conditions 2-4 and add language to Special Condition 6 clarifying that the 0.5% coal sulfur limit is applied on a "wet basis."⁴ (Exhibit 4) Movants are requesting that the Commission overturn the Executive Director's issuance of those permit alterations.

³ SWEPCO had previously voluntarily requested that the TCEQ alter its permit to add a special condition requiring it to conduct PM stack testing every third year. That request was made at an August 28, 2007 meeting with a TCEQ Air Permits Division staff member.

⁴ Movants incorrectly refer to the permit that the Executive Director altered (Permit No. 4381/PSD-TX-3) as a Prevention of Significant Deterioration ("PSD") permit. That permit is not a PSD permit, even though some conditions in it are PSD permit conditions. That permit is a consolidated permit that was created in September, 1998 when the agency administratively consolidated into one permit the conditions in the renewed state permits for the three units (issued June 22, 1994 for Unit 1, May 4, 1998 for Unit 2, and September 10, 1998 for Unit 3) and the PSD permit for Units 2 and 3 (issued for Units 2 and 3 on November 9, 1976, and re-issued for Unit 2 on February 28, 1978). Only a subset of the conditions in the consolidated permit originated in the PSD permit issued for Units 2 and 3. None of those conditions were changed as a result of the permit alteration. Neither the heat input language in Special Conditions 2-4 nor the 0.5% sulfur limit in Special Condition 6 originated in the PSD permits.

II. ARGUMENT

Movants have presented no legal or factual basis, and none exists, for the Commission to overturn the Executive Director's March 20, 2007 issuance of the altered permit that deleted the references to heat input in Special Conditions 2-4 and added language clarifying that the 0.5% coal sulfur limit in Special Condition 6 is on a "wet basis." The Motion contains no new information or argument that was not available to the Executive Director to consider when he made his decision to issue the altered permit.

Movants assert in their Motion that (i) it was impermissible for the Executive Director either to delete the references to heat input in Special Conditions 2-4 or to add language clarifying that the 0.5% coal sulfur limit in Special Condition 6 is on a "wet basis," without first allowing "formal public participation," and (ii) the Executive Director should not have made such clarifying changes because doing so was purportedly contrary to preliminary findings reflected in the April 11, 2005 EDPRP (which recommended that SWEPCO obtain authorization to increase what the EDPRP referred to as the heat input limits and the 0.5% (dry basis) coal sulfur limit). (Exhibit 5 contains a copy of pre-altered Permit No. 4381/PSD-TX-3.) Essentially, Movants ask the Commission to find that SWEPCO should have been required to obtain a permit amendment, rather than a permit alteration, to delete the heat input references in Special Conditions 2-4 and make the clarifying change to the 0.5% coal sulfur limit in Special Condition 6, or that the Executive Director's issuance of the EDPRP robbed him of any opportunity to receive and reconsider additional information and revise his preliminary interpretations regarding the meanings of Special Conditions 2-4 and 6. Neither proposition is correct. Therefore, the Executive Director was authorized to make both of the clarifying permit changes using a permit alteration. Moreover, Movants have the burden of proof relative to each of the issues raised in their Motion. Movants have not met that burden, and their Motion should be denied.

- A. The Executive Director's decision to make the clarifying permit changes using a permit alteration was authorized and appropriate.

Movants incorrectly assert that the Executive Director should have required a permit amendment, rather than a permit alteration, to delete the heat input references in Special

Conditions 2-4 and make the clarifying changes to the 0.5% coal sulfur limit in Special Condition 6.

1. Use of a permit alteration to delete the references to heat input in Special Conditions 2-4 was authorized and appropriate.

Movants' assertion that the deletion of the references to heat input that were in Special Conditions 2-4 required a permit amendment is based on Movants' erroneous assumptions that (i) the references to heat input of 5,156 MMBtu/hr in those special conditions and the permit applications constituted permit "limits," and (ii) the deletion of the heat input references that were in Special Conditions 2-4 will result in an increase in emissions from the units. (Motion, page 10). For Movants' assertion that such deletions required a permit amendment to be true, both of those assumptions would have to be true. Neither of those assumptions is true, as SWEPCO demonstrated to the Executive Director through written documentation to, and oral presentations at meetings with, Executive Director staff. Therefore, the Executive Director was correct in not requiring a permit amendment to delete the references to heat input that were in Special Conditions 2-4, and instead deleting those references through a permit alteration.

- a. The references to heat input of 5,156 MMBtu/hr were not permit limits.

The references to 5,156 MMBtu/hr that were in Special Conditions 2-4 and in the permit applications were not, and were never intended to be, permit limits. A limit is the "greatest ... amount, number, or extent allowed." (American Heritage Dictionary of the English Language, 4th Edition). Thus, a permit "limit" constitutes the greatest number that a permit allows a unit to achieve during actual operations. As discussed below, the references to 5,156 MMBtu/hr did not render 5,156 MMBtu/hr the greatest heat input that was allowed for the units during their actual operations; therefore, those references do not constitute permit "limits."

Movants assert that the references to heat input of 5,156 MMBtu/hr in Special Conditions 2-4 prior to the permit alteration "expressly characterized the heat input as a limit." (Motion, page 9). That assertion is wrong. If the agency intended those references to be permit limits, it would have written Special Conditions 2-4 to provide that the heat input to each unit "is limited to", or "shall not exceed", 5,156 MMBtu/hr. (Affidavit of Karen Olson, paragraph 9 (Exhibit 6)) For example, SWEPCO is aware of several permits for other coal-fired electric generating units

that each contain a special condition stating expressly that the heat input "shall be limited" or "is limited" to the specified heat input level. (See two examples in Exhibit 7). By contrast, before Special Conditions 2-4 were altered, they contained such no language or similar language. (Exhibit 5) The "shall not exceed" language in those conditions related to the emissions limits applicable to the units, not to the references to heat input of 5,156 MMBtu/hr. (*Id.*)

Movants erroneously assert that SWEPCO represented in the permit applications that it would "operate the Welsh [units] at no more than 5,156 MMBtu/hr," and that any reference to 5,156 MMBtu/hr in a permit application is deemed to be a permit limit under 30 TAC 116.116(a)(1). (Motion, page 9) In fact, SWEPCO has never represented that the Welsh units would "operate ... at no more than 5,156 MMBtu/hr," i.e., that 5,156 MMBtu/hr would be the maximum actual heat input that any of the units can achieve during their operations. What SWEPCO did represent in its permit applications is that each unit would be "designed" (as opposed to "operated") such that its heat input would be 5,156 MMBtu/hr, i.e., each unit's "design" heat input would be 5,156 MMBtu/hr. (Exhibits 8-9). Movants seem to recognize this based on their statement that in the permit applications, SWEPCO relied on the "design" heat input of 5,156 MMBtu/hr. (Motion, page 4).

In the permit applications for the three units, SWEPCO consistently represented 5,156 MMBtu/hr as being the "design" heat input. For example, the process descriptions in the units' permit renewal applications states that the units were "designed to accommodate" a heat input of 5,156 MMBtu/hr. (Emphasis added) (Exhibit 8). Further, Footnote 1 in the "Maximum Emissions Limitations" calculations tables in the units' permit renewal applications states that the heat input of 5,156 MMBtu/hr was calculated based on a "design" specification of 625,000 lb/hr coal feed rate and a "typical" coal heat content of 8,250 Btu/lb. (Exhibit 9). SWEPCO included the references to "design"/"typical" in the permit renewal applications because the units' manufacturer represented to SWEPCO that 5,156 MMBtu/hr was the units' maximum "design" heat input, as contrasted to their maximum actual heat input.

It is apparent that the Executive Director understood that the references to 5,156 MMBtu/hr in the permit applications were to the units' "design" heat input, and not their maximum actual heat input. For example, the "Renewal Analysis and Technical Review"

associated with the Unit 3 permit renewal contained a statement that the unit "is designed for...a heat input of 5,156 MMBtu/hr on an as received basis." (Emphasis added.) (Exhibit 10). In addition, the agency drafted Special Conditions 2-4 such that 5,156 MMBtu/hr was included in parenthetical language with the units' "nameplate" megawatt (MW) generation capacity of 558 MW. (Exhibit 5) The word "nameplate" is synonymous with the word "design." (Affidavit of Karen Olson, paragraph 7 (Exhibit 6)). Therefore, the inclusion of the heat input of 5,156 MMBtu/hr with the "nameplate" MW in the parenthetical language in Special Conditions 2-4 further shows that the TCEQ knew at the time it issued the renewed permits for the units that SWEPCO had represented that 5,156 MMBtu/hr was the units' "design" heat input, and not that it would "operate the [units] at no more than 5,156 MMBtu/hr," as Movants assert.

The "design" heat input is the heat input that during the units' design phase, the units' manufacturer expected the units could achieve during their actual operations if the units were operated at their "design" steam flows and "design" temperatures and pressures, given all the other "design" parameters associated with the units' steam cycles. A "design" or "nameplate" rate is not intended to constitute the maximum rate that a unit can achieve in actual operations. (Affidavit of Karen Olson, paragraph 7 (Exhibit 6)). The "design" or "nameplate" heat input for the Welsh units is certainly not the maximum heat input that those units have been able to achieve in actual operations. Those units have always been able to operate, and have regularly operated, at heat inputs above 5,156 MMBtu/hr. That is supported by the heat input data in the table in Exhibit 11, and the heat input data from the first year of operation of each unit, which are in the table in Exhibit 12.

Movants erroneously suggest that SWEPCO has admitted, as reflected in its April 5, 2004 Title V permit renewal submission, that the references to 5,156 MMBtu/hr in Special Conditions 2-4 were permit limits. (Motion, p. 7) First of all, whatever language was included in the April 5, 2004 submission characterizing the references to 5,156 MMBtu/hr in Special Conditions 2-4 is irrelevant to the Executive Director's determination as to whether those references indeed were permit limits. (See Exhibit 13) In addition, the person who prepared the Compliance Plan and Schedule and signed the associated cover letter was Bill Wilson, who at the time was the Air Quality Engineer for AEP Service Corporation (which provides engineering, environmental, and other support services to the Welsh Plant), and who

subsequently became Movants' consultant. (Declaration of Paul Franklin, paragraphs 4, 6-7 (Exhibit 14)) Mr. Wilson had the responsibility for making the technical assessments necessary to prepare a draft of the Compliance Plan and Schedule for Paul Franklin, the responsible corporate official for SWEPCO, to sign. (Declaration of Paul Franklin, paragraph 4 (Exhibit 14)) Mr. Franklin testified in a suit that Movants filed against SWEPCO that he signed the Compliance Plan and Schedule in reliance on Mr. Wilson's representations and professional judgment. (Declaration of Paul Franklin,, paragraphs 3-6 (Exhibit 14)). Mr. Franklin testified that he had insufficient time before the Compliance Plan and Schedule was due to conduct an independent evaluation of the accuracy of the language Mr. Wilson included in the Compliance Plan and Schedule claiming that the references to 5,156 MMBtu/hr in Special Conditions 2-4 were limits that were being exceeded. (Declaration of Paul Franklin, paragraph 6 (Exhibit 14)) After the Compliance Plan and Schedule was submitted, Mr. Franklin (and other SWEPCO personnel) determined that Mr. Wilson's interpretation of the references to 5,156 MMBtu/hr in the Welsh permit was based on his personal views only, was inaccurate, and was inconsistent with SWEPCO's interpretation. (Declaration of Paul Franklin, paragraphs 6-7 (Exhibit 14)) SWEPCO's position that the references to 5,156 MMBtu/hr that were in Special Conditions 2-4 were not permit limits is reflected in Title V Semiannual Compliance Certifications that it submitted subsequent to the April 5, 2004 submission. (See, e.g., the January 26, 2005 Title V Semiannual Compliance Certification (Exhibit 15)) For these reasons, the language in the Compliance Plan and Schedule that was attached to an April 5, 2004 letter does not constitute an admission by SWEPCO that the references to 5,156 MMBtu/hr in Special Conditions 2-4 were permit limits.

- b. Even assuming, *arguendo*, that the references to heat input of 5,156 MMBtu/hr were "limits," it would is not true that the deletion of those references "will" result in any increase in the emissions from any of the units.

Assuming, *arguendo*, that the references to heat input of 5,156 MMBtu/hr in Special Conditions 2-4, prior to the permit alteration, or in the permit applications did constitute permit limits, Movants' are still incorrect in their assertion that the Executive Director should have required a permit amendment to delete such references. Under 30 TAC § 116.116(b)(1)(C), a permit amendment would have been required for such deletions only if it is true that such

deletions “will cause” an increase in emissions from the unit. (Emphasis added.) For that to be true, there would have to be a relationship between the heat input to a unit and the emissions from the unit such that increasing the heat input will, i.e., in every instance, cause an increase in the emissions of at least one air contaminant from the unit.

There is no such relationship between heat input to and emissions from any of the units. There are many variables, besides heat input, that impact the rates of emissions from the units. (Affidavit of Karen Olson, paragraph 8 (Exhibit 6).) Key variables include the characteristics of the coal burned in the unit (such as sulfur content, ash content, and alkalinity), atmospheric pressure and temperature, and the combustion temperature and available oxygen and nitrogen in the unit's combustion zone. (*Id.*) Because some or all of those variables are independent of each other, and of the heat input, one or more of such variables could decrease while the heat input increases. Because of that, it is possible that one or more variables could decrease to the degree that the emissions of one or more air contaminants can decrease even if the heat input increases.

The conclusion that there is no such relationship between the heat input to and the emissions from the units is supported quantitatively by operational data for the Welsh units and other coal-fired electric generating units. SWEPCO prepared tables of hourly and annual data, which it discussed with, and gave to, TCEQ Air Permits Division staff at multiple meetings. Those tables are discussed below.

The table found in Exhibit 16 shows hourly heat input and emissions data for the Welsh units over a range of heat input levels. That data, which are from the units' continuous emissions monitoring systems (CEMS), show that when the heat inputs to a unit were the same during two different hours, emissions either increased or decreased significantly during those same two hours. The table found in Exhibit 17 shows the same type of data and conclusions for several non-Welsh coal-fired electric generating units. The table found in Exhibit 18 shows examples where the hourly heat input to one of the Welsh units during one of two different hours was significantly higher than the heat input during the other hour, but the unit's hourly emissions were significantly lower during the hour when the heat input was higher.

The table found in Exhibit 19 shows annual heat input and emissions data for the Welsh units. It shows examples where the annual heat input to one of the units during one year was

significantly higher than the heat input during the other year, but the unit's annual emissions were significantly lower during the year when the annual heat input was higher. Finally, the table found in Exhibit 20 shows the same type of data and conclusions for a non-Welsh electric generating unit.⁵

Together, these tables demonstrate quantitatively that there is no relationship between the heat input to any Welsh unit and the emissions from that unit, such that the emissions from the unit "will", i.e., in every instance, increase if the heat input to the unit increases. There are simply too many other variables that influence emissions, and the units are dynamic systems in which fuel and operating characteristics are constantly changing.

For the foregoing reasons, it is not true that deleting the units' heat input "will cause" an increase in the emissions rate of any air contaminant from the units, which is a pre-requisite under 30 TAC §116.116(b)(1)(C) for the Executive Director to have required a permit amendment. Therefore, the Executive Director was correct in not requiring SWEPCO to obtain a permit amendment to delete those heat input references from Special Conditions 2-4, even assuming, *arguendo*, that those references and the references to 5,156 MMBtu/hr in the permit applications were permit limits. As a result, the Executive Director properly deleted the references to heat input in Special Conditions 2-4 using a permit alteration.

Since it is not true that deleting the units' heat input "will cause" an increase in the emission rate of any air contaminant from the units, the heat input cannot, as Movants assert, be the basis for determining compliance with the permit emissions limits that the "design" heat input of 5,156 MMBtu/hr was used to calculate. (Motion, p. 7). While Movants claim that the "design" heat input of 5,156 MMBtu/hr was used to calculate emission rates for PM, CO, NO_x, and VOC (Motion, page 7), in truth, PM is the only air contaminant for which Movants' claim is true. The emissions limits for the other air contaminants either were determined by stack testing following SWEPCO's fairly recent installation of additional NO_x controls (i.e., low-NO_x burners and over-fire air) to the units (i.e., the CO and NO_x emissions limits), or were calculated without reference to the "design" heat input of 5,156 MMBtu/hr (the VOC emissions limits).

⁵ In preparing the annual data tables, SWEPCO was careful to not include any years during which the NO_x emissions controls (low-NO_x burners and over fire air) that SWEPCO installed on the units became operational.

Compliance with the PM permit emissions limits has always been determined based on PM stack testing, and SWEPCO is required to conduct more frequent PM stack testing pursuant to Special Condition 29 of the altered permit. (Exhibit 4)

- c. Use of a permit alteration was authorized and appropriate to resolve the ambiguities regarding the heat input references in Special Conditions 2-4 the Welsh permit

For the foregoing reasons, the references to 5,156 MMBtu/hr were not limits, and it was not true that the deletion of those references from Special Conditions 2-4 "will" cause any increase in the emissions from any of the units. As a result, the deletion of those ambiguous references from Special Conditions 2-4 was merely a clarification, and did not substantively change the permit. In light of that, the Executive Director was clearly authorized, under 30 TAC 116.116(c), to use a permit alteration to delete the references to 5,156 MMBtu/hr from Special Conditions 2-4, and it was appropriate for the Executive Director to do so.

2. The Executive Director correctly altered the permit to add language to Special Condition 6 to clarify that the 0.5% coal sulfur limit is on a "wet basis."

Movants base their assertion that the Executive Director improperly used a permit alteration to add language to Special Condition 6 to clarify that the 0.5% coal sulfur limit is, and has always been, on a "wet basis," on the erroneous assumption that this fuel characteristic limit was developed and has always been applied on a "dry basis." (See e.g., Motion, pp. 8-9). SWEPCO demonstrated to the Executive Director's satisfaction that the 0.5% coal sulfur limit was developed and has always been applied on a wet basis. Accordingly, it was proper for the Executive Director to determine that adding language to Special Condition 6 to clarify that the 0.5% coal sulfur limit is on a "wet basis" did not substantively change that limit, nor did it cause a change in the method of emissions control or an increase in the emissions, and, thus, did not require a permit amendment under 30 TAC § 116.116(b). Therefore, it was proper for the Executive Director to add such clarifying language to Special Condition 6 using a permit alteration.

There is evidence within the permit itself that the 0.5% coal sulfur limit has always been applied on a wet basis. First, even before the permit alteration, Special Condition 6 provided

that "Fuels used in the Units 1, 2, and 3 boilers shall be limited to the following: ... sub-bituminous coal containing no more than 0.5% total sulfur by weight." (Emphasis added). (Exhibit 5) The coal that SWEPCO "uses" as fuel in the units always contains moisture, which means the limit is applied on a "wet basis" (sometimes referred to as "as received basis") (Affidavit of Karen Olson, paragraph 10 (Exhibit 6)). Put another way, the coal "used" by SWEPCO as fuel in the units is not dried to remove all moisture before it is used. (*Id.*) Therefore, the existence of the word "used" in Special Condition 6 demonstrates that the 0.5% coal sulfur limit is applied on a "wet basis." (*Id.*)

Moreover, although Special Condition 6, prior to the permit alteration, did not state expressly whether the 0.5% coal sulfur limit was to be applied on either a wet or dry basis, SWEPCO demonstrated to the Executive Director's satisfaction that such limit is only consistent with the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4 of the permit if it is applied on a "wet" basis. SWEPCO's demonstration is based on a quantitative evaluation of references about the percent sulfur content of the coal and its heating value (in Btu/lb) that were included in the applications for the original and renewed state permits and the Units 2 and 3 Prevention of Significant Deterioration ("PSD") permit. That evaluation was conducted by SWEPCO's technical consultant, Karen Olson. Ms. Olson's analysis and conclusions are summarized below and in her Affidavit, which can be found in Exhibit 6.

The purpose for a permit condition related to a fuel characteristic, such as the 0.5% coal sulfur limit in Special Condition 6, is generally to provide a mechanism to demonstrate compliance with emissions limits, such as the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4 of the permit. (Affidavit of Karen Olson, paragraph 11 (Exhibit 6)) Therefore, the basis - wet or dry - of the 0.5% coal sulfur limit in Special Condition 6 must be the same as the basis for the emissions limits to which it corresponds, which are the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4.⁶ (*Id.*) To determine whether the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4 are to be applied on a wet or dry basis, Ms. Olson calculated what the SO₂ emissions are in lb/MMBtu based on the references to percent sulfur and

⁶ Movants seem to concur with this statement based on their statement on page 4 of their Motion that the SO₂ "emissions limits were based on a maximum sulfur content of 0.50%" (although they incorrectly assert that calculation of those limits were based on 0.5% sulfur content on a dry basis).

coal heating value in the applications for the original and renewed state permit and the PSD permit. (Affidavit of Karen Olson, paragraph 12 (Exhibit 6)) The SO₂ emissions calculated based on the "wet basis" percent sulfur and coal heating value references range from 1.13 to 1.21 lb/MMBtu, and the SO₂ emissions calculated based on the "dry basis" percent sulfur and coal heating value references are 0.85 lb/MMBtu. (Affidavit of Karen Olson, paragraph 13 (Exhibit 6)) Since the SO₂ emissions of 1.13 to 1.21 lb/MMBtu calculated using the "wet basis" percent sulfur and coal heating values are almost identical to the SO₂ emissions limits in Special Conditions 2-4, which range from 1.1 to 1.2 lb/MMBtu, the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4 clearly are based on sulfur coal content that is applied on a wet basis. (Affidavit of Karen Olson, paragraph 14 (Exhibit 6)) Therefore, the 0.5% coal sulfur limit in Special Condition 6 must be applied on a wet basis. (*Id.*)

The foregoing demonstrates that, prior to the permit alteration, the 0.5% coal sulfur limit in Special Condition 6 was always on a wet basis. This conclusion is not, and cannot be, altered by the parenthetical reference to 0.5% coal sulfur being on a dry basis that the TCEQ permit engineer included in the August 31, 1998 "Permit Renewal Source Analysis and Technical Review" form for Unit 3 (to which Movants cite on page 9 of their Motion). (Exhibit 10, page 3). That reference is flatly inconsistent with language the TCEQ subsequently included in Special Condition 6 of the renewed permit that provides that the 0.5% coal sulfur limit applies to the coal as "used" as fuel in the units, which (as stated above) means that limit is on a wet basis. (Affidavit of Karen Olson, paragraph 10 (Exhibit 6)) The language in Special Condition 6 of the permit that was subsequently issued by the TCEQ clearly supersedes the passing, and inconsistent, statement of a TCEQ employee in the technical review form prepared before the permit was issued. In addition, the reference in that form to 0.5% coal sulfur being on a dry basis is inconsistent with the above-described demonstration by SWEPCO that the 0.5% coal sulfur limit must be applied on a wet basis in order to be consistent with the lb/MMBtu SO₂ emissions limits in Special Condition 2-4.

For the foregoing reasons, the Executive Director was correct in concluding that, prior to the permit alteration, the 0.5% coal sulfur limit in Special Condition 6 was developed and applied on a wet basis. All the permit alteration did was to expressly clarify that such limit is applied on a wet basis. The permit alteration did not, as Movants assert, substantively change o

the 0.5% coal sulfur limit, which means it did not cause an increase in SO₂ emissions from, or a change in the method of control of, the units. In light of that, it was clearly appropriate, under 30 TAC 116.116(c), for the Executive Director to have used a permit alteration to add the language to Special Condition 6 that clarifies that the 0.5% coal sulfur limit is applied on a wet basis.

- B. Even though public participation was not required or appropriate for the heat input and % coal sulfur permit changes, Movants were provided the opportunity to provide input regarding those requested changes to the Executive Director, and the Executive Director considered and responded to Movants' suggestions

Since the Executive Director was clearly authorized to alter the permit to delete the heat input references in Special Conditions 2-4 and add "wet basis" to Special Condition 6, there was no requirement for formal public notice or participation as part of that process. The permit alteration process clearly does not (and should not) require formal public notice and participation. (See 30 TAC 116.116(c).)

Nevertheless, the Executive Director gave Movants an adequate opportunity to participate in the Executive Director's evaluation of the requested alterations. For example, Movants submitted a September 23, 2005 letter to the Executive Director, presenting their concerns to the requested alterations. (Exhibit 2). The Executive Director not only considered the concerns Movants expressed in that letter in making his decision on the requested alterations, he actually incorporated certain of Movants' suggestions into the requested alterations. With respect to the requested alteration to delete the references to 5,156 MMBtu/hr in Special Conditions 2-4, Movants suggested on the last page of their September 23, 2005 letter that the Executive Director "should not grant [that] request without establishing clear parameters for determining compliance with PM emission limits that are consistent with periodic monitoring required by law." The Executive Director responded to that suggestion when he added a new Special Condition 29 that requires SWEPCO to conduct stack testing on the units on a regular basis to determine whether the PM emissions (as well as CO and VOC emissions) comply with the PM (and CO and VOC) emissions limits. In addition, with respect to SWEPCO's initial request to delete the 0.5% coal sulfur limit, Movants suggested in their September 23, 2005 letter that the Executive Director not delete that limit. The Executive Director responded to that suggestion by refusing to delete that limit. However, after SWEPCO presented information to

the Executive Director that demonstrated to the Executive Director's satisfaction that the 0.5% coal sulfur limit is and has always been applied on a wet basis, the Executive Director properly added language to Special Condition 6 to clarify that the 0.5% coal sulfur limit is applied on a wet basis.

C. The Executive Director's issuance of the permit alterations was not inconsistent with his enforcement case or August 31, 1995 letter to SWEPCO.

Movants assert that the Executive Director should not have made the heat input and percent sulfur permit changes using a permit alteration because doing so was inconsistent with the Executive Director's initial positions in his separate enforcement proceeding relating to the heat input references to 5,156 MMBtu/hr in Special Conditions 2-4 and the 0.5% coal sulfur limit in Special Condition 6 (as reflected in the EDPRP dated April 11, 2005)⁷ (Motion, pp. 2-3), and in an August 31, 1995 letter to SWEPCO.

Movants' assertions are unsupportable. They erroneously assume that the EDPRP is the equivalent of a final action that binds the Executive Director, and precludes him from changing his position in response to new information submitted by SWEPCO or other interested parties. However, the title of the EDPRP itself – “Executive Director Preliminary Report and Petition” – demonstrates to the contrary. In addition, the statements in the EDPRP to which Movants refer are over two years old. The Executive Director made those statements before SWEPCO had the opportunity to present to the Executive Director the evidence and arguments that ultimately persuaded the Executive Director that the requested heat input and % coal sulfur permit changes were only clarifications of the existing permit, and, thus, could be made using a permit alteration. That evidence and those arguments also support the conclusion that the statements in the EDPRP to which Movants refer no longer reflect the Executive Director's position. That conclusion is further supported by a statement in the Executive Director's March 19, 2007 “Permit Alteration Technical Review” form that the “agency [has] decided not to pursue enforcement against SWEPCO” for the allegations relating to exceeding the heat input references to 5,156 MMBtu/hr or the 0.5% coal sulfur limit on a dry basis. (Exhibit 21). Therefore, it was not inconsistent

⁷ As an aside, SWEPCO notes that Movants did not assert, and had no basis to assert, that the Executive Director was prohibited from making the permit changes using a permit alteration due to the Executive Director's Preliminary Report and Petition; Movants merely claim that the Executive Director “should not have” done so.

with, and did not “undercut” in any way, the Executive Director’s enforcement action for the Executive Director to have made the heat input and percent sulfur permit changes using a permit alteration.

Movants also erroneously assert that language from the August 31, 1995 letter from the Texas Natural Resource Conservation Commission (“TNRCC”) to Kathleen Young of SWEPCO (which language Movants quote on page 7 of their Motion) shows that the TCEQ has always considered the references to 5,156 MMBtu/hr to be permit limits. (Exhibit 22). Movants have taken that language completely out of context. Properly read in context, that language does not support Movants’ assertion because it applied only from August 31, 1995 to August 31, 1996⁸, and only when recovery wastes were being evaporated in Welsh Unit 1. Specifically, the letter states that evaporation of such wastes from August 31, 1995 to August 31, 1996 was “subject to the following conditions,” one of which was that the “heat input rate shall not exceed 5,156 MMBtu/hr”. Since the language that Movants cite in the letter has not applied since August 31, 1996, it is not inconsistent with the Executive Director’s deletion of the references to heat input from Special Conditions 2-4 using a permit alteration.

III. PRAYER

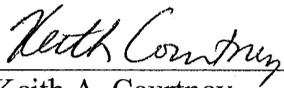
No legal or factual basis has been presented, or exists, for the Commission to overturn the Executive Director’s March 20, 2007 issuance of alterations to Permit No. 4381/PSD-TX-3 to delete the references to heat input from Special Conditions 2-4 or to add language to Special Condition 6 clarifying that the 0.5% coal sulfur limit is applied on a “wet basis.” Therefore, SWEPCO respectfully requests that the Commission deny Movants’ Motion or allow it to be denied by operation of law.

⁸ The last sentence of the second paragraph of the letter says “This authorization is not to exceed 12 months from the date of this letter”, which was August 31, 1995.

Respectfully submitted,

Keith A. Courtney
State Bar No. 04892700
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By: 
Keith A. Courtney

ATTORNEYS FOR SOUTHWESTERN
ELECTRIC POWER COMPANY

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing *Southwestern Electric Power Company's Brief in Response to Motion to Overturn* has been filed with the Office of the Chief Clerk, Texas Commission on Environmental Quality, and copies provided to the persons listed on the attached Mailing List via hand delivery on the 16th day of May, 2007.

By: 
Keith A. Courtney

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TCEQ Docket No. 2007-0598-AIR

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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)

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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1002 West Ave Austin, Texas 78701
512-477-1155

September 23, 2005

COPY

Mr. Glenn Shankle
Executive Director
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Regarding: Revision of SWEPCO's Welsh Power Plant permit PSD-Tx-3

Dear Mr. Shankle:

We write to raise concerns about revisions to the PSD permit for the Welsh Power Station. SWEPCO/AEP proposed these revisions on August 6, 2004. We believe the changes would:

- Increase emission rates for sulfur dioxide by eliminating current restrictions on the sulfur content of the coal burned at the Welsh plant;
- Increase emission rates for particulate matter by narrowing the definition of that pollutant to include only filterable particles;
- Make it impossible to determine whether AEP is complying with emission limits for particulate matter.

Because the requested revisions would increase allowable levels of pollution, they should be treated as permit amendments subject to the provisions of 30 TAC § 116.111, which requires a public hearing and an updated review of the best available control technologies for the pollutants in question.

Changes in sulfur content of coal consumed at Welsh Plant will increase allowable emission rates.

Special condition six of the current permit limits fuel use at the Welsh plant to "sub-bituminous coal containing no more than 0.5 percent total sulfur by weight," and to "No. 2 fuel oil containing no more than 0.5 percent total sulfur by weight." In addition, hourly emissions of sulfur dioxide are limited to 1.2 lbs. SO₂/mmbtu at Unit 1; 1.1 lbs SO₂ at Unit 2, and 1.12 lbs. SO₂ at Unit 3. Finally, conditions 1 and 7 make clear that, where provisions of the permit conflict, the most stringent condition applies. See, conditions 1 and 7. AEP, after having been

conflict, the most stringent condition applies. See, conditions 1 and 7. AEP, after having been cited for repeatedly violating these restrictions, proposes to eliminate any restrictions on the sulfur content of coal consumed at the Welsh plant.

Because the Welsh units are not scrubbed, emissions of sulfur dioxide can be expected to increase in proportion to the sulfur content of the coal at the plant. EPA's own AP-42 factors are based on the relationship between sulfur content and sulfur dioxide emissions at unscrubbed plants, adjusted for coal type and boiler characteristics. For example, EPA estimates that burning subbituminous coal with 0.5% sulfur content at a tangential-fired, dry-bottom boiler would release 19 pounds of sulfur dioxide per ton of coal consumed. Subbituminous coal with 1% sulfur content would yield 38 pounds of sulfur dioxide per ton of coal consumed.

The Babcock & Wilcox steam book provides the following formula for converting emissions per ton of coal to emissions based on heat input: $\text{lbs SO}_2/\text{ton of coal} \times 500 \div \text{heat value of coal (Btu/lb)} = \text{SO}_2/\text{mmBtu}$. On June 23, 2004, AEP reported burning coal with a heat value of 9313 Btu per pound when conducting a stack test at Welsh Unit 1. Applying the Babcock & Wilcox formula above, coal with a heat value of 9313 and a sulfur content of 0.5% could generate no more than 1.02 lbs of sulfur dioxide per mmBtu. In this case, relaxing the current permit by removing restrictions on the use of higher sulfur coal would allow emissions to rise to the maximum permitted emissions rate of 1.2 MMBtu, almost 20% higher than emissions under the current sulfur restrictions.

In short, sulfur dioxide emissions at the Welsh plant are permit-limited in two ways: by restricting the sulfur content of the coal consumed at the plant and through emission rates based on heat input. The limitation on coal sulfur content effectively holds emission rates of sulfur dioxide well below the maximum rates based on heat input. Thus, eliminating restrictions on sulfur content will increase allowable emissions.

Federal regulations exempt fuel switching from New Source Review under certain circumstances but only when not "prohibited under any federally enforceable permit condition which was established after January 6, 1975..." 40 CFR 52.21(e). As the PSD-TX-3 permit was renewed in 1998 and includes federally enforceable permit conditions, the exemption for fuel switching does not apply to the AEP Welsh plant.

TCEQ Rules and PSD-TX-3 Permit Apply to All Forms of Particulate Matter

AEP's current PSD permit sets alternate limits on particulate matter based on heat input and mass emission rates measured in pounds per hour. For example, PM emissions at Welsh Unit 1 are limited to no more than 0.1 lbs/MMBtu, or 515 pounds per hour. Total particulate emissions from power plants typically are comprised of particles that are trapped on a filter during in-stack sampling, as well as tiny particles that can only be measured in an impinger after condensation. TCEQ's federally enforceable rules make clear that particulate matter emissions include both filterable particles, and those "caught by an impinger train." According to EPA, the condensable particles measured in impingers are smaller than 2.5 microns, and are thought to be especially damaging to public health.

AEP would like to "clarify" that the emission limits in its permit apply only to filterable particles, but AEP offers no legal justification to support its request. The only TCEQ guidance we have identified clearly contemplates including all particulate matter, when determining compliance with emission standards:

"The federal standard does not include the particulate captured in the impingers after the filter in this train, commonly referred to as the back half analysis. Some permit provisions may also refer to this standard, but all other places including the limitations for PBR use in the Subchapter A: General Requirements of Chapter 106, and standard mass rate limitations in the Maximum Allowable Emission Rate Table of permits, and generally all other references to particulate matter are based on the state definition of particulate matter, which includes the particulate captured in the impinger, the back half analysis." *TCEQ Guidance on Waiving PM Testing Requirements of New and Relocated Hot Mix Asphalt Plants, April 3, 2002, citing Air Rule Interpretation Team Determination R06-147-001.*

We have identified no specific reference in either TCEQ regulations or the Welsh permit itself that would support the narrow definition of particulates proposed by AEP. While the original PM emission limits may have been established to meet federal NSPS standards, these have long since been subsumed by the PSD permits issued by TCEQ under state implementation plan rules. Even Method 5, which is used to determine compliance with NSPS PM limits, anticipates including condensible particulates where required by state law. To the extent that there is any conflict between NSPS and TCEQ definitions of particulate matter, the PSD permit itself requires application of the more stringent standard.

TCEQ is apparently considering establishing separate emission rates for filterable and condensable particles in response to AEP's request for "clarification." We do not understand how TCEQ can subdivide an emission standard in a permit into two new and separate standards without complying with the requirements of New Source Review.

PSD-TX-3 Requires No Monitoring of PM Emissions; Eliminating Heat Input Limits Would Make Compliance Determinations Almost Impossible

PSD-TX-3 sets emission limits based on heat input, and on mass emission rates measured in pounds per hour. PSD-TX-3 also establishes a "maximum heat input" of 5156 MMBtu/hour. Mass emission limits are determined by multiplying the maximum heat input by the emission rates per unit of heat input identified in special conditions 2 through 4 of its permit. For example, Unit 1 is limited to 515.6 pounds per hour of particulate matter, or 5156 mmBTU x 0.1mmBtu.

Having violated maximum heat input limits for many years, AEP now proposes to eliminate this restriction altogether. If TCEQ grants AEP's request, it will be even more difficult to determine compliance at the Welsh facility. Although the Welsh permit establishes hourly emission limits for particulate matter, there are no requirements at all in the current permit to test for compliance with that limit. Incredibly, between 1982 and 2004, not a single stack test was conducted at any of the Welsh units to measure compliance with hourly emission limits. AEP

finally conducted a stack test in June of 2004, after a whistleblower revealed consistent violations of the heat input limits and other permit requirements at the Welsh plant. This belated effort to measure compliance appears to have been conducted under favorable conditions, e.g., when opacity was low and at heat input levels that do not approach the maximum levels achieved in the recent past.

TCEQ should not grant AEP's request without establishing clear parameters for determining compliance with particulate matter emission limits that are consistent with periodic monitoring required by law. If TCEQ intends to use opacity as a surrogate for measuring compliance, it should make clear that particulate matter violations will be triggered when opacity standards are not met.

We appreciate your taking the time to consider our views, and would be happy to meet with you to discuss our concerns in greater detail.

Sincerely,

Ken Kramer
w/p Annie Bricker
Ken Kramer, Director
Sierra Club, Lone Star Chapter

Tom Smith
w/p Annie Bricker
Tom "Smitty" Smith
Public Citizen

xc: John Sadlier
Eric Hendrickson
Eric Schaeffer
David Frederick



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

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.

AUSTIN 459370v3 29011-00012

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EXHIBIT 3

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.

...

#7. 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.

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.

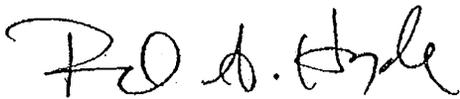
Mr. Kris Gaus
Page 2
March 20, 2007

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

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 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 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 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

Page 4

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
SO₂ - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM₁₀.
PM₁₀ - 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 SO₂ 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

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.

EXHIBIT 5

Mr. Kris Gaus

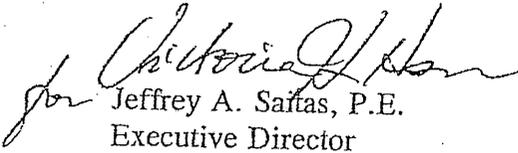
Page 2

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. Saffas, 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"

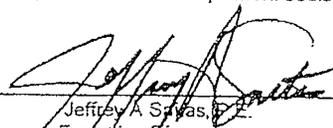
1. The facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from 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))
1. This permit may be appealed pursuant to 30 TAC 50.39.
 2. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. (30 TAC 116.110(d)).
 3. 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.
- 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))
- 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 late 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

RMIT

September 10, 1998

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Jeffrey A. Sivas, 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

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.

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 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.

3. I have spent my entire career working on air quality matters. In 1979, I started working with the Texas Air Control Board (TACB) as a permit reviewer in the New Source Review Division. I worked at TACB and its successor agencies for the next 26 years in New Source Review, Operating Permits and Technical Analysis Divisions. For 22 years, I worked in New Source Review and Operating Air Permits Divisions. As senior permit engineer, the agency relied upon me to develop and teach the permit engineer training program, and to develop many documents used by the permit engineers and regulated community in air quality permitting matters. I represented the agency at EPA Region 6 on many air quality permit review issues. With respect to training, I taught all the permit engineers a variety of courses including topics related to the Federal and Texas Clean Air Acts, federal and state air permitting requirements, permit review, permit provision drafting, appropriate monitoring, testing, and compliance demonstration options for different emissions. In 2005, I retired from the TCEQ, and thereafter I joined Zephyr. At Zephyr, I have continued to work on air quality matters for private clients. My work at Zephyr has included air quality regulatory and compliance support, and preparing NSR permit applications.

4. I specialize in regulatory and technical support for air quality permitting and compliance matters. I am qualified to review TCEQ (and its predecessors) air permits and offer opinions on the meaning of the special conditions of those permits based on my background and expertise.

5. The following statements are based on my personal knowledge, as well as on my academic training and professional experience. I have reviewed the applications and related documents associated with Permit No. 4381/PSD-TX-3 ("permit").

6. The following information and opinions were presented to TCEQ Executive Director personnel in writing and/or orally in discussions in which I participated.

Heat Input

7. Based on my review of the applications and related documents associated with the permit, and on my years of experience reviewing permit applications, the references to heat input of 5,156 MMBtu/hr, in Special Conditions 2-4 of the September 10, 1998 permit, were the "design" heat input, also referred to as "nameplate" heat input, for the units. The "nameplate" or "design" heat input is generally a rate the manufacturer has designed the unit to attain. It is not necessarily a maximum; rather, it is a value that the manufacturer has stated can be achieved. Therefore, it is my professional opinion that the references to 5,156 MMBtu/hour that were in Special Condition 2-4 cannot be interpreted as constituting the units' maximum heat input in actual operation.

8. The relationship between heat input and air pollutant emissions is not a direct relationship (i.e., such that an increase in heat input will always cause an increase in emissions) because many independent variables affect the emissions produced from a unit. These variables include combustion unit temperature, available oxygen and nitrogen in the combustion chamber, trace constituents in the fuel, and other factors (such as characteristics of the coal burned in the unit (such as ash content and alkalinity) and atmospheric pressure and temperature).

9. Based on my statements above, in my professional judgment, the references to heat input in Special Conditions 2-4 of the September 10, 1998 permit were not limits. Had a heat input limit been intended, Special Conditions 2-4 would have been written in the manner that agency permit writers were trained to write limitations, such as "unit 1 boiler shall not be

fired at a rate higher than 5,156 MMBtu per hour". Other ways agency permit writers might have written Special Conditions 2-4 if they intended the references to heat input to be limits would be to write those provisions to provide that the heat input to each unit "shall not exceed" or "is limited to" 5,156 MMBtu per hour.

Percent Sulfur

10. Special Condition 6.A. of both the altered permit and the September 10, 1998 permit states as follows: "Fuels used in the Unit 1, 2, and 3 Boilers shall be limited to ... sub-bituminous coal containing no more than 0.5 percent total sulfur by weight...". (Emphasis added.) Therefore, it is clear that the composition limit of 0.5% sulfur in this condition is established on an as used basis. Coal in actual operation contains moisture (i.e., the coal is not dried before it is used as fuel); therefore, any analysis to demonstrate compliance with the 0.5% sulfur limit in Special Condition 6.A. had to be on a wet basis.

11. Permit conditions related to a fuel composition limit, such as the 0.5% sulfur limit in Special Condition 6.A., is typically included to provide a mechanism to demonstrate compliance with performance standards, such as the lb/MMBtu SO₂ emissions limits in Special Conditions 2-4. Therefore, the basis (wet or dry) of the 0.5% sulfur composition limit in Special Condition 6.A. should directly relate to (i.e., be on the same basis (wet or dry) as) the lb/MMBtu SO₂ performance standards in Special Conditions 2-4.

12. To determine which basis (wet or dry) was used to develop the permit limit (i.e., the 0.5% sulfur composition limit in Special Condition 6.A.) that correlates to the performance standards (i.e., the lb/MMBtu SO₂ limits in Special Conditions 2-4), I examined information included in the application documents for the three units. A table summarizing that

information is in Attachment 1 to this Affidavit. I gave a copy of that table to the Executive Director personnel in attendance at a meeting held on February 13, 2007.

i. Only two of the documents provide coal analyses (0.5 wt% Sulfur) on a dry basis (Documents 1-2 in Attachment 1). However, these same documents also provide the heating value of the coal on a dry basis at 11,780 Btu per lb and a design maximum fuel feed rate on a dry basis of 437,500 lb/hr.

ii. One document (Document 3 in Attachment 1) clearly provides coal analysis (max. 0.48% Sulfur) and heating value (8455 Btu per lb) on a wet basis (32% moisture). Although the feed rate of 633,000 lbs per hour provided in this document does not clearly specify it is on a wet basis, it is easy to conclude it is on a wet basis since the dry basis feed rate of 437,500 (Documents 1-2 in Attachment 1) is 31% lower than the feed rate reported in Document 3 and the moisture content is reported at 32% in Document 3.

iii. The remainder of the documents (Documents 4-6 in Attachment 1) do not specify wet or dry but represent 0.5 wt% Sulfur, 8200 to 8500 Btu/lb and 625,000 lb per hour coal feed rate. The Btu values and the feed rates for iii are very similar to ii above, and ii is on a wet basis, so I conclude that the analysis presented in iii is also on a wet basis at about 32%.

13. So, to determine if the information presented on a dry basis (discussed in i above) or the information presented on a wet basis (discussed in ii and iii above) was the basis of the permit limits (i.e, the lb/MMBtu SO₂ performance standards in Special Conditions 2-4, and, therefore, of the 0.5 % sulfur limit in Special Condition 6.A.), I evaluated the data provided in all these documents (Documents 1-6 in Attachment 1) in light of the SO₂ performance

standards (lb/MMBtu) that the units are required to meet. Special Conditions 2-4 specify the SO₂ performance standards (lb/MMBtu) to be in a range from 1.1 to 1.2 lb SO₂ per million Btu, depending on the unit. Using the wt% Sulfur and the heating value data provided in the documents discussed above in i, ii, and iii, I calculated the lb SO₂/mmBtu corresponding to these sets of data:

- i. 0.85 lb SO₂/mmBtu (based on the data in Documents 1-2 in Attachment 1)
 - ii. 1.13 lb SO₂/mmBtu (based on the data in Document 3 in Attachment 1)
 - iii. 1.17 lb SO₂/mmBtu (based on the data in Document 4 in Attachment 1)
- 1.21 lb SO₂/mmBtu (based on the data in Documents 5-6 in Attachment 1)

See Attachment 2 of this Affidavit for the detailed calculations. I gave a copy of those calculations to the Executive Director personnel in attendance at a meeting held on February 13, 2007.

14. Based on this analysis, since the wet basis analysis calculation in ii. and iii. (i.e., the lb/MMBtu SO₂ emissions calculated based on the "wet basis" wt% Sulfur and the heating value data), which showed SO₂ emissions ranging from 1.13 to 1.21 lb/MMBtu, corresponds most closely to the lb/MMBtu SO₂ performance standards in Special Conditions 2-4, (which range from 1.1 to 1.2 lb/MMBtu), I conclude that the weight % Sulfur limit established in Special Condition 6.A is on a wet basis. The dry basis analysis calculation in i. (i.e., the lb/MMBtu SO₂ emissions calculated based on the "dry basis" wt% Sulfur and the heating value data), which was 0.85 lb SO₂/MMBtu, does not correspond meaningfully to the lb/MMBtu SO₂ performance standards in Special Conditions 2-4 (which range from 1.1 to 1.2 lb/MMBtu) and therefore, cannot be the basis of the weight % Sulfur permit limit established in Special Condition 6.A.

15. To the extent there are application documents for the three units, other than those identified in Attachment 1 to this Affidavit, that contain the same or similar wt% Sulfur, heating value data, and coal feed rate, my analysis and conclusion would continue to be that the 0.5 % sulfur limit in Special Condition 6 of the permit is, and has always been, on a wet basis. One example of another document containing the same or similar data is a June 12, 1973 report describing an evaluation of the ambient effects of the three units' emissions, which is not referenced in Attachment 1. Since the wt% Sulfur, heating value data, and coal feed rate data referenced in the June 12, 1973 report are the same as the wt% Sulfur, heating value data, and coal feed rate data referenced in Documents 1-2 in Attachment 1, such data in the June 12, 1973 report would not change my analysis or conclusion that the 0.5 %sulfur limit in Special Condition 6 of the permit is, and has always been, on a wet basis.



Karen Olson, P.E.
Principal
Zephyr Environmental Corporation

SUBSCRIBED AND SWORN TO by the aforesaid Karen Olson, P.E. this 14th day of May, 2007, to certify which witness my hand and official seal.



Connie Bissonnet
Notary Public in and for the State of Texas

Connie Bissonnet
Printed or Typed Name of Notary

My Commission Expires: 06-02-08

Attachment 1

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

Attachment 2
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

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

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

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

SPECIAL CONDITIONS

Permit Number [REDACTED]

OPERATIONAL LIMITATIONS

1. The emissions from the steam generator stack shall not exhibit an opacity greater than 20 percent (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity.
2. Fuel shall be a low sulfur western coal and/or an equivalent coal with properties that will ensure compliance with the permit maximum allowable emission rates as specified by General Condition No. 8.
3. In-stack concentration of sulfur dioxide from the boiler burning fuel oil shall not exceed 440 parts per million by volume.
4. The firing rate of the Boiler [Emission Point No. (EPN) HS-1] shall be limited to 3,630 MMBtu/hr on an hourly average.
5. Regarding the emissions from the Fly Ash Handling System (EPN HS-2), the holder of this permit shall load ash from the ash silo into enclosed trucks for disposal, storage, or sale. A scalper system shall be used to return to the ash silo any particulate dust emissions from the loading operations. Visible emissions from the truck loading operations shall not exceed 10 percent averaged over a six-minute period as measured by the U. S. Environmental Protection Agency (EPA) Reference Method 9.

FEDERAL REQUIREMENTS

6. This facility shall comply with the following applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - A. Subpart A, General Conditions,
 - B. Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971.

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 shall govern and be the standard by which compliance shall be demonstrated.

SPECIAL PROVISIONS

Permit No. [REDACTED]

Page 2

- with the sulfur emission limit stated in Special Provision No. 3 by calculating the daily average SO₂ emission rate and the monthly average emission rates according to the appropriate equation of EPA Reference Method 19 as determined by the use of fuel sampling or CEMS for raw data collection.
8. Operation of the boiler is limited to a maximum heat input of 4,251 MMBtu/hour and 37,238,760 MMBtu/year. The emission limitations specified are based on this coal utilization rate.
 9. Instruments shall be installed, as approved by the Executive Director, for continuous monitoring and recording of opacity and stack gas temperature. The holder of this permit shall install CEMS for NO_x and SO₂ that are approved by the Executive Director after promulgation in the Federal Register of final regulations, enacted pursuant to the 1990 amendments to the Federal Clean Air Act, for the design and location of CEMS for NO_x and SO₂. Such CEMS shall be installed within nine months of approval by the Executive Director of the specifications for the design and location of the CEMS which are in accordance with the aforementioned federal regulations for CEMS. Until such time as a CEMS is installed for SO₂, the holder of this permit shall conduct fuel sampling and analyses for SO₂ in accordance with the provisions of 40 CFR 60.45(b)(2). Within 60 days after installation of the CEMS for NO_x and SO₂, testing shall be performed in accordance with 40 CFR 60, Appendix B, Specifications 2 and 3. Three copies of the test report shall be submitted to the TACB within 30 days of testing as follows, one copy to the Permits Program, one copy to the regional office with jurisdiction, and one copy to the Compliance Division.
 10. Upon request of the Executive Director, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. Sampling must be conducted in accordance with appropriate procedures of the TACB Sampling Procedures Manual and in accordance with applicable EPA Code of Federal Regulations Procedures. Any deviations from those procedures must be approved by the Executive Director prior to sampling. The Executive Director or his designated representative shall be afforded the

WSI 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. SWEPCO 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

xc: 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



Central and South West Services, Inc.

Application for Renewal
Permit No. 4379
Welsh Power Station, Unit Two
Titus County, Texas
Account ID No. TF-0012-D

Submitted to:
Texas Natural Resource Conservation Commission
12124 Park 35 Circle
Austin, Texas 78767

Prepared for:
Southwestern Electric Power Company
P.O. Box 21106
Shreveport, Louisiana 71156

Prepared by:
Central And South West Services, Inc.
P.O. Box 660164
Dallas, Texas 75266-0164

February, 1997

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 3,793,000 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 mm Btu/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. The precipitator consists of four energized fields, which maintain a collection efficiency of 99.6%. Combustion gasses, after passing through the precipitator are emitted to the atmosphere through a 360 foot rectangular stack.



Central and South West Services, Inc.

1616 Woodall Rodgers Freeway
Dallas, Texas 75202
P.O. Box 560164 • 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 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.

Unit Two Emissions Calculations

Maximum Emissions Estimates							
Pollutant		Boiler Requirement		Emissions			
		Requirement	Emission Factor	lb/hr	Ton/yr.		
NO _x	(Oxides of Nitrogen)	5156	MMBtu/Hr ¹	0.7	lb/MMBtu ³	3,609.2	15,808.3
CO	(Carbon Monoxide)	312.5	Tons coal/Hr ²	0.5	Lb/Ton ⁴	156.3	684.4
VOC	(Volatile Organic Compounds)	312.5	Tons coal/Hr ²	0.06	lb/Ton ⁴	18.8	82
SO ₂	(Sulfur Dioxide)	5156	MMBtu/Hr ¹	1.2	lb/MMBtu ⁵	6,187.2	27,099.9
PM	(Particulate Matter)	5156	MMBtu/Hr ¹	0.1	lb/MMBtu ⁶	515.6	2,258.3

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

² 625,000lbs/hr coal / 2,000lbs/ton

³NSPS Subpart D 40 CFR 60.44(a)(3)

⁴AP-42 Table 1.1-11

⁵NSPS Subpart D 40CFR60.43(a)(2)

⁶NSPS Subpart D 40CFR60.42(a)(1)

Welsh Power Station Unit Three Emissions Calculations

Maximum Emissions Limitations							
Pollutant		Boiler		Emission Factor		Emissions	
		Requirement	Representation	Emission Factor	Representation	lb/hr	Ton/yr.
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

² 625,000lbs/hr coal / 2,000lbs/ton

³NSPS Subpart D 40 CFR 60.44(e)(3)

⁴AP-42 Table 1.1-11

⁵USEPA PSD PERMIT

**PERMIT RENEWAL
SOURCE ANALYSIS & TECHNICAL REVIEW**

Permit No: 4381
Project Type: RNEW
Record No: 55667
Account No: TF-0012-D

Company: Southwestern Electric Power Company
Facility Name: WELSH POWER PLANT, Unit 3
City: Pittsburg
County: Titus

AUTHORIZATION CHECKLIST (any "Yes" requires signature by Executive Director):

Will a new policy/precedent be established?	No
Was at least one public hearing request received?	No
Is a state or local official opposed to the permit?	No
Is waste or tire derived fuel involved?	No
Are waste management facilities involved?	No

PROJECT OVERVIEW

Central and South West Services Inc., the holding company for Southwestern Electric Power Company (SWEPSCO), has applied for renewal of the Air Quality Permit No. 4381 for Unit 3 Boiler at the SWEPSCO Welsh Power Station located near Mount Pleasant, Titus County, Texas. This application for renewal represents no change in method of operation, control, or an increase in emission of any air contaminant. Unit 3 Boiler is rated at 5,156 MMBtu/hr and the generator at 558 MW. The boiler uses 312.5 tons pulverized coal per hour for fuel with a maximum fuel flow rate of 625,000 lb/hr. Heating value for fuel is 8,250 Btu/lb on an as received basis. The boiler has a design maximum of 3,793,000 lb/hr of steam generation. Coal handling is authorized under permits 1576 and 4380. The startup fuel is No. 2 fuel oil, which is stored on site in a 22,000 bbl tank authorized under an exemption. The Unit 3 Boiler's Prevention of Significant Deterioration Permit (PSD-TX-3) is authorized by letter from EPA dated November 9, 1976 and a reaffirmation letter dated February 28, 1978. PSD permit maximum emission allowables for Unit 3 are 358.2 lbs/hr PM and 5771 lbs/hr SO₂. These PSD allowables are below the New Source Performance Standard (NSPS) allowables of 0.1 lbs/MMBtu PM and 1.2 lbs/MMBtu SO₂. Nitrogen oxide emissions are based on the NSPS standard of 0.7 lb/MMBtu both in the original permit and in this renewal application. Emission limits in the original permit were 1,569 tpy PM; 25,277 tpy Sulfur Dioxide; 15,807 tpy Nitrogen Oxides; 958 tpy Nonmethane VOC; and 1,916 tpy Carbon Monoxide.

Emission limits proposed in this renewal application are identical to the levels in the original permit for PM, SO₂, and NO_x. In this renewal application, the applicant proposed lower emission limits for Nonmethane VOC (82.0 tpy) and CO (684.0 tpy) due to the use of lower AP-42 emission factors. The actual Continuous Emissions Monitoring (CEMS) data indicates that emissions from Unit 3 are under the maximum allowables for SO₂ and NO_x. There is also an associated fly ash silo which has emissions of less than 0.1 tpy of PM.

REGULATION VI RULES - RENEWAL REQUIREMENTS

- 116.312 Public Notification and Comment
 - A. Date application received: 12/08/97 Date application complete: 8/31/98
 - B. Public notice mailed 3/20/98
 - C. Pollutants: NO_x, CO, VOC, SO₂, and PM
 - D. Published: 4/7/98 & 4/8/98 in Mount Pleasant Daily Tribune
 - E. Bilingual public notification required? No
 - F. Number of public comments? 0 Technical issues? No
 - Hearing requested? ... No Hearing held? N/A
 - Meeting requested? ... No Meeting held? N/A
 Comments:
 - G. Certification of sign posting per 116.133? Yes

- 116.311(d) Date of expiration of permit? 2/25/98
- 116.310 Date written notice of review was mailed 05/30/97
- 116.310 Date application for Renewal (PI-1R) received? 12/08/97
- 116.311(a)(1) Is the facility being operated in accordance with all requirements and representations specified in the current permit and do the emissions from the facility comply with all TNRCC air quality rules and regulations, and with the intent of the Texas Clean Air Act? Yes

- 116.311(a)(2) Compliance with applicable NSPS? Yes
 - Subparts A & D
- 116.311(a)(3) Compliance with applicable NESHAPS? N/A

- 116.311(b)(1) Is additional information regarding emissions from the facility and their impacts on the surrounding area required? No
- 116.311(b)(2) Does the facility use appropriate control technology, considering costs, age and impact of emissions? Yes

- 116.311(c) Compliance History
 - A. Any specified NOV's relating to this permit? No
 - B. Is facility in substantial compliance with TCAA and terms of existing permit? Yes
 - C. Any unresolved nonclerical violations of TNRCC air quality rules? No
 Remarks:

Southwestern Electric Power Company (SWEPCO) had no formal enforcement action taken in the last five years. The SWEPCO had an NOV of Chapter 111.101 on 02/20/91 which was resolved on 03/05/91. The SWEPCO had an NOV of Chapter 116.4 on 12/04/92 which was resolved on 12/22/92.

116.314(a) The facility meets all permit renewal requirements? Yes
 116.314(b) Contested case hearing involved? No
 116.313 Permit Renewal Fee: \$ 10,000 Paid? Yes

REQUEST FOR COMMENTS

REGION: 5, Tyler Reviewed by: Charles Murray, 8/30/98, Incorporated Region's comments into the permit.
 CITY: Reviewed by:
 COUNTY: Reviewed by:
 TARA: Reviewed by:
 COMP: Yes Reviewed by: Tel Croston, 3/31/97, No problem with this application.
 LEGAL: Reviewed by:

REVIEW SUMMARY

PROCESS DESCRIPTION

Unit 3 Boiler is a Babcock & Wilcox Company, drum type, pulverized coal-fired boiler, with a maximum design capacity of 3,793,000 lb/hr of steam generation. Fuel for the boiler is sub-bituminous coal, transported to the plant site by a railcar. The boiler is designed for a coal intake of 312.5 tons/hr with a heat input of 5,156 MMBtu/hr on a as received basis. The pulverized coal is transported by primary air to the burners through a system of coal-air piping. Boiler ignition is accomplished through the use of No.2 fuel oil, supplied from a single 22,000 bbl. storage tank. 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 to a primary ash settling basin where the majority of the suspended solids settle. Partially clarified effluent overflows to a secondary settling basin for additional clarification, and finally effluent is discharged to a 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 gases exiting the electrostatic precipitator are emitted to the atmosphere through a 360 foot rectangular stack. Fly ash is collected in hoppers beneath the electrostatic precipitator and transported by a vacuum pipeline 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.

SOURCES, CONTROLS AND BACT

The Unit 3 Boiler is the source of the products of combustion, NO_x, CO, VOC, SO₂, and PM. There are PM emissions from the Unit 3 Ash Silo as well. Boiler PM and SO₂ emission rates are originated from the PSD permit allowables. The PSD allowables are below the New Source Performance Standard (NSPS) allowables of 0.1 lbs/MMBtu for PM and 1.2 lbs/MMBtu for SO₂. Boiler NO_x emissions are based on the original permitted level of 0.7 lb/MMBtu, which is the NSPS allowable. In this renewal application, the applicant used an AP-42 factor of 0.5 lb/ton for CO (AP-42 for CO was 2.0 lb/ton in the original permit) and an AP-42 factor of 0.06 lb/ton for VOC (AP-42 for VOC was 1.0 lb/ton in the original permit). Applicant has no objection if the emission factors for CO and VOC are kept unchanged in the renewed permit. Low sulfur coal (0.5%S, dry basis) is used as fuel. Boiler PM

emissions are controlled with an Electrostatic Precipitator. PM emissions from the ash silo are controlled with a baghouse.

IMPACTS EVALUATION

- 1. Was modeling done? Type? No - Dispersion modeling was performed for Welsh Unit 2 Boiler during the original application.
- 2. Will GLC of any air contaminant cause violation of NAAQS? No - according to PSD Permit
- 3. Is this a sensitive location with respect to nuisance? No
- 4. Is the site within 3000 feet of any school? No
- 5. Toxics Evaluation: N/A

COMPLIANCE HISTORY

- 1. Was a NOV issued for construction without a permit? No
- 2. Was the NOV resolved by issuance of permit? N/A

MISCELLANEOUS

- 1. Is applicant in agreement with special conditions? Yes
- Company representative(s) Mr. Kris Gaus
- Contacted via? E-mail, Phone
- Date of contact? 8/12/98, 8/20/98, 8/24/98, 8/25/98

Comments: Per applicant's request, Permit #1166 for Unit 1 Boiler and Permit #4379/PSD-TX-899 for Unit 2 Boiler and PSD Permit No. PSD-TX-3 are consolidated with permit 4381. Also, the following standard exemptions and permit authorizations are rolled in: Permit Authorizations Dated : November 10, 1987; April 3, 1992; August 14, 1998 Standard Exemption Nos. 38370, 33325

M. Ozden Tamer
 M. Ozden Tamer
 Permit Engineer

8/31/98

Date

[Signature]
 Team Leader

9/4/98
 Date

Historical heat input and electricity generation for Welsh units

UNIT 1				
Year	Annual heat input (MMBtu)	Average hourly heat input (MMBtu/hr)	Annual generation (MWh)	Average hourly generation (MWh)
1995	29,383,792	--	2,366,660	--
1996	38,175,642	--	3,249,180	--
1997	41,199,880	5,330	3,417,428	442
1998	40,378,457	5,299	3,510,581	461
1999	36,790,008	5,383	2,972,595	435
2000	45,987,706	5,716	4,007,757	498
2001	40,145,693	5,481	3,478,904	475
2002	44,460,711	5,423	3,910,140	477
2003	39,119,710	5,310	3,486,758	473
2004	39,063,420	5,132	3,628,395	477
2005	38,137,557	5,082	3,543,675	472

EXHIBIT 11

* The Acid Rain Database is the source of the heat input data and the annual operating hours data that were used to calculate the average heat inputs and average MWh. SWEPCO's Generation Availability Data System is the source of the MWh data.

Historical heat input and electricity generation for Welsh units

UNIT 2				
Year	Annual heat input (MMBtu/hr)	Average hourly heat input (MMBtu/hr)	Annual generation (MWh)	Average hourly generation (MWh)
1995	30,393,792	--	2,618,792	--
1996	34,619,324	--	3,045,727	--
1997	39,710,657	5,166	3,519,080	458
1998	40,714,846	5,486	3,464,324	467
1999	46,987,383	5,560	3,888,617	460
2000	40,559,017	5,415	3,666,386	490
2001	42,288,654	5,329	3,804,366	479
2002	42,775,451	5,210	3,910,867	476
2003	40,105,273	5,240	3,642,516	476
2004	37,832,506	4,955	3,594,361	471
2005	28,897,624	4,713	2,781,030	454

* The Acid Rain Database is the source of the heat input data and the annual operating hours data that were used to calculate the average heat inputs and average MWh. SWEPCO's Generation Availability Data System is the source of the MWh data.

Historical heat input and electricity generation for Welsh units

UNIT 3				
Year	Annual heat input (MMBtu/hr)	Average hourly heat input (MMBtu/hr)	Annual generation (MWh)	Average hourly generation (MWh)
1995	32,307,549	--	2,858,698	--
1996	37,966,755	--	3,351,573	--
1997	38,834,400	5,144	3,442,301	456
1998	39,657,676	5,240	3,529,306	466
1999	39,956,362	5,557	3,080,908	429
2000	41,356,924	5,569	3,693,231	497
2001	44,330,631	5,293	4,127,647	493
2002	41,740,250	5,296	3,739,633	475
2003	41,193,955	5,269	3,684,905	471
2004	39,925,065	5,115	3,721,145	477
2005	39,200,897	5,058	3,725,674	481

* The Acid Rain Database is the source of the heat input data and the annual operating hours data that were used to calculate the average heat inputs and average MWh. SWEPCO's Generation Availability Data System is the source of the MWh data.

Heat input data from initial operation of units

Unit	Heat input (MMBtu/hr)
Unit 1	5,557
Unit 2	5,292
Unit 3	5,333

* The source of heat input data in the table were the acceptance tests that were conducted for the units shortly after they began normal operations.



April 5, 2004

CERTIFIED MAIL RETURN RECEIPT REQUESTED

7003 1680 0004 4425 9388

Ms. Becky L. Southard
Air Permits Division (MC-162)
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Re: Welsh Power Plant
Title V Renewal Application
Permit Number O-00026
Customer Number: CN600126767
Reference Number: RN100213370

Dear Ms. Southard:

This letter responds to your request for information dated March 5, 2004.

Attached is the OP-ACPS form that indicates units W-1, W-2, and W-3 are exceeding the heat inputs listed in condition 2, 3, and 4 of permit PSD-TX-3/4381. Our corrective action plan is to submit a permit amendment to increase the allowable heat input.

Unit W-11 is an open coal storage pile. The only potential requirement for W-11 is NSPS Subpart Y, so the applicable UA Form on OP-SUM should be OP-REQ2. I have revised form OP-SUM to make this change and included W-11 on the OP-REQ2 form.

Attached is a complete copy of the OP-1 form (Rev. 11-15-2002).

It appears that Emission Point ID No. 1, 2, and 3 listed in the original application on Form OP-UA15 are identical to W-1, W-2, and W-3 and should not have been included in the original application as separate units. W-1, W-2, and W-3 represent the 3 steam generating boilers at Welsh. Please delete 1, 2, and 3 from the permit.

Units W-10, W-11, W-12, W-13, W-14, W-15, and W-16 do not have the potential to emit high enough to be considered major pre-control devices. Therefore, they do not need an OP-MON filled out with CAM applicability. However, they do have periodic monitoring requirements under Subpart Y. Attached is OP-MON form for those units listing PM-P-02 as the PM option. Also, W-1, W-2, and W-3 steam generating boilers

Texas Natural Resource Conservation Commission
 Texas Federal Operating Permit Form
 OP-ACPS (Part 2)
 Application Compliance Plan and Schedule

Account No.	TF-0012-D	Permit Name	Welsh Power Plant	Date	April 5, 2004
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III. Compliance Schedule Section (Details)

A. Identification of Specific Situation of Noncompliance

Unit/Group/Process		Seq No	Pollutant	Applicable Regulatory Requirement	
ID No.	Type			Citation	Text Description
W-1, W-2, and W-3	EU	All	All Criteria	PSD-TX-3/4381	Exceed Condition 2, 3, 4 heat input

B. Identification of Method Utilized to Assess Compliance Status and Location of Records Documenting Situation Details

Method Used to Assess Compliance		Location of Records Documenting Situation Details
Compliance Method Citation	Text Description	
40 CFR Part 60.45	Continuous Emission Monitors	CEMS records and Electronic Data Reports

C. Brief Description of the Noncompliance Situation

Exceed heat input value due to change in heat rate since construction

D. Brief Description of Corrective Action Plan

File an application to revise or amend permit PSD-TX-3/4381

E. List of Activities/Milestones to Implement the Corrective Action Plan

1	Submit a revision or amendment application to the TCEQ by September, 2004
2	
3	
4	
5	

Previously Submitted Compliance Plan(s)	Type of Action	Date Submitted
	NA	NA

G. Schedule for Submitting Progress Reports	Every 3 months beginning three months after the permit is issued.
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IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION

PUBLIC CITIZEN et al.,

Plaintiffs,

v.

AMERICAN ELECTRIC POWER
COMPANY, INC. et al.,

Defendants.

)
)
)
)
) Civil Action No. 5:05-cv-00039-DF
)
)
)
)
)

Declaration of Paul W. Franklin

I, Paul W. Franklin, declare under penalty of perjury under the laws of the United States of America, and in accordance with 28 U.S.C. § 1746, that the foregoing is true and correct:

1. I am an employee of American Electric Power Service Corporation, and my current position is Director of Fossil Generation for Region 5. In that capacity, I have responsibility over plant managers operating the Southwestern Electric Power Company ("SWEPCO") fleet of power plants. I also serve as a Vice President of SWEPCO.
2. I make this declaration based on my personal knowledge in support of Defendants' Response In Opposition To Plaintiffs' Motion For Declaratory Judgment And Partial Summary Judgment On Claims I, II, And IV.
3. Plaintiffs have attached to their motion Exhibit F, which appears to be a letter to the Texas Commission on Environmental Quality's (TCEQ's) Air Permits Division, signed by former American Electric Power Service Corporation employee Bill Wilson, concerning the

Welsh power plant. Included with Exhibit F is a one-page excerpt from the original attachments to Mr. Wilson's letter, which is entitled "Texas Natural Resource Conservation Commission - Texas Federal Operating Permit Form - OP-APCS (Part 2) - Application Compliance Plan and Schedule" (for short - Form OP-APCS). While not included in Attachment F, a complete copy of Form OP-APCS would show that I signed that form as the responsible corporate officer. The form purports to identify "exceed[ing] heat input value" as an alleged "noncompliance situation" for the Welsh plant's Title V air operating permit.

4. At the time the letter included in Attachment F was submitted to TCEQ, Mr. Wilson was an Air Quality Engineer with responsibility for providing support to the Welsh plant for air permitting and compliance matters. His responsibilities included reviewing data and drafting various regulatory reporting forms, including the Form OP-APCS.

5. Part of my job responsibilities as a Vice President of SWEPSCO is to sign submissions to agencies such as TCEQ which require the certification of a responsible corporate officer. In doing so, I must rely on the representations and professional judgments of the engineers and other professional staff who support the plants and draft the submissions.

6. At the time I signed Form OP-APCS, Mr. Wilson had developed a personal theory that the references to heat input in the Welsh plant's Consolidated Permit were references to actual limitations on operations. I am not aware of anyone else who held that view or had been told that was the case by TCEQ. Furthermore, it was Mr. Wilson who prepared the form that was attached to the letter in Attachment F, and that I signed. When Mr. Wilson asked me to sign that form, I had not been able to conduct my own evaluation of the heat input issue or to seek advice of counsel. Given the very limited time between the date Mr. Wilson presented me

with the form and its due date, as I recall, I had to sign the form in reliance on Mr. Wilson's representations to me that it was correct.

7. Mr. Wilson's view of the meaning of the heat input terminology used in the Consolidated Permit does not represent the view of SWEPCO or AEP, and therefore the statements in Exhibit F on Form OP-APCS regarding heat input do not represent the view of SWEPCO or AEP, just the personal views of Mr. Wilson. Shortly after the date of the letter in Attachment F, Mr. Wilson was terminated for insubordination. He challenged his termination in an action filed with the U.S. Department of Labor, but he ultimately dismissed his petition after a preliminary finding against him. I understand that since being terminated, Mr. Wilson has been become a consultant for the Plaintiffs in this case.

Executed on April 20, 2006

Paul W. Franklin
Paul W. Franklin



**AMERICAN
ELECTRIC
POWER**

American Electric Power
P.O. Box 660184
Dallas, TX 75266-0184
aep.com

January 26, 2005

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

7004 2510 0000 8949 8942

Texas Commission on Environmental Quality
Mr. Charles Murray
2916 Teague Drive
Tyler, Texas 75701-3756



Re: Title V Semiannual Compliance Certification
Southwestern Electric Power Co.
Welsh Power Plant
Title V Permit No. O-00026
CN600126767, RN100213370

Dear Mr. Murray:

This letter and the attached form constitute Southwestern Electric Power Company's (SWEPCO) semi-annual compliance certification for its Welsh Plant. In addition to the information set forth on the attached form, be advised that TCEQ has issued Notices of Enforcement (NOEs) to the Welsh Plant for alleged violations of permitting or regulatory provisions applicable to the units at the Plant. In particular, on July 19, 2004, TCEQ's regional office issued an NOE to the Welsh Plant alleging that SWEPCO failed to maintain heat input to the units below 5156 MMBtu/hour on various days, and failed to limit the sulfur content in the coal burned in the Welsh units to 0.5% sulfur or less on various days, when measured on a dry basis. On July 23 and September 15, 2004, SWEPCO submitted its response to the NOE, denying the allegations in it and outlining the measures to be taken to prevent the recurrence of these issues. To fulfill the commitments SWEPCO made in its July 23, 2004 letter, on August 6, 2004, SWEPCO submitted a request for a permit alteration to TCEQ to remove both the 0.5% sulfur content of coal limitation and any references to the design heat input from its permit, without altering any of the Maximum Allowable Emission Rates currently applicable to the Welsh units. TCEQ has not yet responded to that request.

Furthermore, on December 17, 2004, TCEQ's regional office issued an NOE to the Welsh Plant alleging exceedances of the particulate matter emissions limits for Units 1 and 3, based on a comparison of the NSPS- and PSD-based particulate matter emissions limits in the Welsh permit to the total particulate matter collected on the filter and in the impinger ("front and back-half")

during a June, 2004 stack test. On January 21, 2005, SWEPCO submitted a detailed response to this NOE, denying the allegations in it and demonstrating that if the appropriate stack test results (the "front-half only" results) are compared to the applicable NSPS- and PSD- based particulate matter emissions limitations, the Welsh units have demonstrated compliance with such limitations by a wide margin. The TCEQ has not yet responded to that submission.

Neither NOE alleges violations occurring during the semi-annual certification covered by the attached form. However, SWEPCO continues to operate the Welsh units in accordance with its historic understanding that the design heat input rate reference is not a permit limit, the 0.5% sulfur content in coal limit is to be determined on a wet (as-burned) basis, and the particulate matter emissions limits are "front-half only" limits. Operation of the Welsh units at heat inputs in excess of the design heat input rate of 5156 MMBtu/hour has been and continues to be necessary on occasion to achieve and sustain full load conditions, and, based on all available information, has not resulted in the exceedance of any emissions limitation in the MAERT, based on SWEPCO's historic understanding of those limits. In addition, coal supplies are sampled and the percent sulfur of those samples has consistently remained below 0.5% on a wet basis as consumed, and SO₂ emissions, which are measured by continuous emissions monitoring systems, have remained below the limits in the permit. Moreover, the PM emissions on a "front-half only" basis from the Welsh units as determined during the June, 2004 stack testing were significantly below the PM emissions permit limits for the Welsh units.

The inclusion of the foregoing information as part of this semi-annual compliance certification is intended to satisfy SWEPCO's obligation under 30 TAC § 122.146(4) to identify material information concerning this certification, and is not intended to waive any defenses or to be deemed as an admission of any liability on the part of SWEPCO. Because there has been no final disposition of the above-discussed alleged violations in the NOEs, and since SWEPCO continues to believe the validity of its above-summarized historical understanding of the permit provisions upon which the alleged violations are based, SWEPCO made its evaluation as to what deviations occurred during the semi-annual period based on such historical understanding. Based on the final disposition of the disputed alleged violations in the NOEs, SWEPCO will make any appropriate adjustments to this semi-annual compliance certification. If you have questions, contact Kris Gaus at (214) 777-1113 or kpgaus@aep.com.

Sincerely,

Paul Franklin

Paul Franklin
Regional Director II

Attachments

- C. Jennifer Meyer, WSH (w/att)
- Jim Trimble, WSH (w/att)
- Air Branch Chief, MC 6EN-A, U.S. EPA, 1445 Ross Ave., Dallas, TX 75202
- File WSH.10.90.20.60.2005

Demonstration of non-linear relationship between heat input and emissions
using data from the Welsh units

	Unit 1									
Heat Input Range (MMBtu/hr)	4168.6- 4169	4240.8- 4241.5	4253.9- 4254.7	4371- 4371	4424- 4424.1	4601.5- 4601.8	4853.6- 4854.1	4893.1- 4893.8	5051.1- 5051.6	5129.2- 5129.9
% Difference	0.01%	0.02%	0.02%	0%	0.002%	0.007%	0.01%	0.01%	0.01%	0.01%
SO ₂ Emissions Range (lb/hr)	3310.4- 1637.6	3089.2- 2085.2	3367.8- 1696.5	2474.8- 2972.7	1779.5- 2963.6	2660.1- 3030.8	3648.7- 1829	1827.6- 2916.2	2748.1- 3475.4	2649.6- 3166.9
% Difference	-102%	-48.1%	-98.5%	20%	66.5%	13.9%	-99.7%	59.6%	26.5%	20%
NO _x Emissions Range (lb/MMBtu)	0.146- 0.119	0.141- 0.125	0.148- 0.154	0.144- 0.15	0.154- 0.147	0.143- 0.146	0.16- 0.137	0.152- 0.142	0.143- 0.152	0.154- 0.167
% Difference	-22.7%	-12.8%	4.1%	4.2%	-4.8%	2.1%	-16.8%	-7%	6.3%	8.4%

7/27/05

Unit 2										
Heat Input Range (MMBtu/hr)	4142.4- 4142.5	4211.2- 4211.7	4284.2- 4284.6	4345.8- 4346	4431.5- 4431.8	4572.1- 4572.1	4662.3- 4663.6	4746.3- 4746.4	5032.1- 5032.4	5133.5- 5133.5
% Difference	0.002%	0.01%	0.009%	0.005%	0.007%	0	0.03%	0.002%	0.006%	0
SO ₂ Emissions Range (lb/hr)	1711.7- 2654.8	3134.7- 2119.5	1594.5- 3000.2	2488.4- 3458.8	2801.4- 2231.6	1714.1- 2730	1711.9- 3166.2	2659.1- 1990.4	3431.5- 2021.8	2225.4- 3809
% Difference	55.1%	-47.9%	88.1%	39.0%	-25.5%	59.3%	85.0%	-33.6%	-69.7%	71.2%
NO _x Emissions Range (lb/MMBtu)	0.284- 0.342	0.293- 0.375	0.343- 0.288	0.355- 0.322	0.31- 0.325	0.265- 0.331	0.351- 0.329	0.334- 0.312	0.346- 0.361	0.368- 0.351
% Difference	20.4%	28.0%	-19%	-6.9%	4.8%	24.9%	-6.7%	-7.1%	4.3%	-4.8%

7/27/05

Unit 3										
Heat Input Range (MMBtu/hr)	4069.3- 4069.6	4142- 4142.7	4224.6- 4224.7	4404.2- 4404.2	4520.8- 4520.8	4634.2- 4634.5	4721.3- 4721.7	4824.5- 4824.8	4998.2- 4998.4	5136.6- 5136.9
% Difference	0.007%	0.02%	0.002%	0	0	0.006%	0.008%	0.006%	0.004%	0.006%
SO ₂ Emissions Range (lb/hr)	2476.1- 2821.8	2771.4- 1687.1	3299.3- 2329.8	3304.2- 2305	2983.2- 1878.5	1839.1- 2622.1	2854.8- 1916.9	2337.9- 3239	3125.1- 2483.6	2690.4- 3838.3
% Difference	14.0%	-64.3%	-41.6%	-43.3%	-59.9%	42.6%	-43.7%	38.5%	-25.8%	42.7%
NO _x Emissions Range (lb/MMBtu)	0.16- 0.192	0.183- 0.15	0.188- 0.154	0.196- 0.16	0.19- 0.168	0.182- 0.185	0.158- 0.187	0.168- 0.166	0.174- 0.158	0.175- 0.175
% Difference	20%	-22%	-22%	-22.5%	-13%	1.6%	18.4%	-1.2%	-10%	0

Demonstration of non-linear relationship between heat input and emissions
using data from non-Welsh electric generating units

	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G
Heat Input Range (MMBtu/hr)	5008.6- 5008.7	5718.5- 5718.6	6308.8- 6310.4	4420.2- 4420.3	3926.5- 3926.7	8494.4- 8494.8	7246.9- 7247.1
% Difference	0.002%	0.002%	0.02%	0.002%	0.005%	0.005%	0.003%
SO ₂ Emissions Range (lb/hr)	3819.1- 1927.5	3351.7- 4338.3	3422.3- 4139	2371.9- 1584	2023.4- 1753.2	5894- 7265	7710.3- 3706.3
% Difference	-98%	29.4%	20%	-49.7%	-15.4%	23%	-108%
NO _x Emissions Range (lb/MMBtu)	0.241- 0.203	0.239- 0.241	0.291- 0.357	0.281- 0.266	0.329- 0.312	0.163- 0.165	0.202- 0.209
% Difference	-18.7%	0.8%	22.7%	-5.6%	-5.4%	1.2%	3.5%

Note: The data above are based on 2 hours of data, except for the Unit A data, which are based on 4 hours of data.

Demonstration based on heat input, and NO_x and SO₂ emissions, data from the Welsh units that an increase in heat input will not necessarily cause an increase in emissions

	Unit 1	Unit 2	Unit 3
Heat Input Range (MMBtu/hr)	3905.6- 5112.7	4127.8- 5152.2	4178.4- 5152.4
% Difference	30.9%	24.8%	23.3%
SO ₂ Emissions Range (lb/hr)	2674.9- 1832	3364.8- 2100.5	3250.5- 1938.5
% Difference	-46%	-60.2%	-67.7%
NO _x Emissions Range (lb/MMBtu)	0.205- 0.142	0.337- 0.297	0.195- 0.157
% Difference	-44.4%	-13.5%	-24.2%

Demonstration of non-linear relationship between heat input and emissions
using annual data from the Welsh units

	Unit 1					
Annual heat inputs for specified years (MMBtu)	41,199,880 (1997)	41,199,880 (1997)	40,145,693 (2001)	39,119,710 (2003)	41,199,880 (1997)	41,199,880 (1997)
	40,378,457 (1998)	40,378,457 (1998)	44,460,711 (2002)	39,063,420 (2004)	44,460,711 (2002)	36,790,008 (1999)
% difference	-2%	-2%	10%	0%	8%	-12%
Annual pollutant emissions in specified years (tons)	14,341 (1997)	5,374 (1997)	12,326 (2001)	10,979 (2003)	14,341 (1997)	5,374 (1997)
	15,607 (1998) (SO ₂)	6,681 (1998) (NO _x)	12,259 (2002) (SO ₂)	11,743 (2004) (SO ₂)	12,259 (2002) (SO ₂)	6,053 (1999) (NO _x)
% difference	8%	22%	-1%	7%	-17%	13%

* The source of the heat input and emissions data in this table is the acid rain database.

EXHIBIT 19

	Unit 2						
Annual heat inputs for specified years (MMBtu)	40,714,846 (1998)	42,288,654 (2001)	42,288,654 (2001)	42,775,451 (2002)	39,710,657 (1997)	40,714,846 (1998)	40,559,017 (2000)
	46,987,363 (1999)	42,775,451 (2002)	42,775,451 (2002)	40,105,273 (2003)	42,775,451 (2002)	42,775,451 (2002)	40,105,273 (2003)
% difference	13%	1%	1%	-7%	8%	5%	-1%
Annual pollutant emissions in specified years (tons)	15,534 (1998)	13,414 (2001)	7,643 (2001)	7,480 (2002)	13,618 (1997)	15,534 (1998)	6,729 (2000)
	14,510 (1999) (SO ₂)	11,937 (2002) (SO ₂)	7,480 (2002) (NO _x)	7,978 (2003) (NO _x)	11,937 (2002) (SO ₂)	11,937 (2002) (SO ₂)	7,978 (2003) (NO _x)
% difference	-7%	-12%	-2%	6%	-14%	-30%	19%

* The source of the heat input and emissions data in this table is the acid rain database.

Unit 3						
Annual heat inputs for specified years (MMBtu)	39,657,676 (1998)	41,193,955 (2003)	41,193,955 (2003)	39,657,676 (1998)	39,657,676 (1998)	41,740,250 (2002)
	39,956,362 (1999)	39,925,065 (2004)	39,925,065 (2004)	44,330,631 (2001)	41,356,924 (2000)	39,925,065 (2004)
% difference	1%	-3%	-3%	12%	4%	-5%
Annual pollutant emissions in specified years (tons)	15,575 (1998)	11,582 (2003)	3,737 (2003)	15,575 (1998)	15,575 (1998)	3,644 (2002)
	12,119 (1999)	11,685 (2004)	4,033 (2004)	13,799 (2001)	12,843 (2000)	4,033 (2004)
	(SO ₂)	(SO ₂)	(NO _x)	(SO ₂)	(SO ₂)	(NO _x)
% difference	-29%	1%	7%	-13%	-21%	11%

* The source of the heat input and emissions data in this table is the acid rain database.

Demonstration of non-linear relationship between heat input and emissions
using annual data from a non-Welsh unit

Annual heat inputs for specified years (MMBtu)	33,650,619 (1995)	29,275,918 (1996)	31,481,829 (1997)	27,185,092 (1998)	29,673,216 (1999)	26,363,195 (2004)
	29,275,918 (1996)	31,481,829 (1997)	27,185,092 (1998)	29,673,216 (1999)	30,354,256 (2000)	28,603,122 (2005)
% difference	-15%	7%	-16%	8%	2%	8%
Annual pollutant emissions in specified years (tons)	11,352 (1995)	4,057 (1996)	3,756 (1997)	4,874 (1998)	10,539 (1999)	8,016 (2004)
	11,570 (1996) (SO ₂)	3,756 (1997) (NO _x)	4,874 (1998) (NO _x)	4,629 (1999) (NO _x)	8,818 (2000) (SO ₂)	7,377 (2005) (SO ₂)
% difference	2%	-8%	23%	-5%	-20%	-9%

EXHIBIT 20

Permit Alteration Technical Review

Company:	Southwestern Electric Power Company (SWEPCO)	Permit No.:	4381/PSD-TX-3
City:	Pittsburg	Project No.:	110539
County:	Titus	Account No.:	TF0012D
Project Type:	CRVN	Regulated Entity No.:	RN100213370
Project Reviewer:	Erik Hendrickson	Customer Reference No.:	CN600126767
Facility Name:	Welch Power Plant		

Project Overview

American Electric Power (AEP) submitted a letter dated March 8, 2007 on behalf of Southwestern Electric Power Company (SWEPCO), requesting revision of Special Condition Nos. 2, 3, 4, and 6A. SWEPCO also requested that special Condition No. 29 be added to their permit to require periodic stack sampling every three years from each of the utility boilers for PM, CO, and VOC. The change to Special Condition Nos. 2, 3, and 4 removes the parenthetical references to design heat input and nameplate generator ratings. The change to Special Condition No. 6A clarifies that the sulfur content limit of the coal is on an as received "wet basis." Several of the recordkeeping conditions were changed to reflect changes described above.

Review Summary

The request by AEP to alter the permit was prompted by alleged permit violations cited by the TCEQ Regional Office. APD did not act on the alteration while Enforcement was considering the alleged violations. After two years of deliberations in TCEQ Enforcement, the agency decided not to pursue enforcement against SWEPCO. The request by AEP meets the definition of an alteration in that the changes to the special conditions do not cause: a change in method of control of emissions, a change in the character of emissions, or an increase in the emission rate of any air contaminant. It is within APD's discretion to authorize AEP's request, since there is no other statutory or regulatory basis to deny AEP's request.

Miscellaneous

1. Is applicant in agreement with special conditions? Yes
 Company representative? Kris Gaus
 Contacted via? Phone
 Date of contact? 12/11/06
2. Other permit(s) affected by this action? None
 If yes, list permit number(s) and actions required or taken.

<i>Erik Hendrickson</i>	<i>3/19/07</i>		
Permit Reviewer	Date	Team Leader/Section Manager/Backup	Date

Pam Reed, *Commissioner*
R. B. "Ralph" Marquez, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

August 31, 1995

Ms. Kathleen Young
Senior Environmental
Project Administrator
SOUTHWESTERN ELECTRIC
POWER COMPANY
P.O. Box 660164
Dallas, Texas 75266-0164

Re: Permit Alteration
Permit No. 1166
Electric Services
Mt. Pleasant, Titus County
Account ID No. TF-0012-D

Dear Ms. Young:

This is in response to your letter dated July 21, 1995 requesting alteration to representations in the permit file. We understand that you propose to evaporate recovery wastes, generated as a result of a remediation project, in the boiler of Welsh Power Plant Unit No. 1. We also understand that the recovery wastes will consist of groundwater and a small amount of No. 2 fuel oil.

You are authorized to conduct the above requested operations for the remediation project referred to in your July 21, 1995 letter, subject to the following conditions. The allowable emission rates of Permit No. 1166 will not be exceeded. The heat input rate shall not exceed 5156 MMBTU/hr as represented in the original application. The injection rate of remediation wastes shall not exceed 50 gallons per minute. Remediation wastes evaporated in the boiler shall consist of No. 2 fuel oil and water only. This authorization is not to exceed 12 months from the date of this letter.

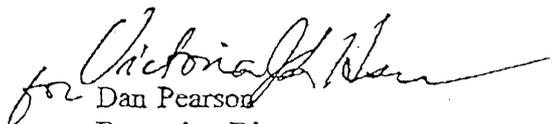
Ms. Kathleen Young
Page 2

August 31, 1995

Pursuant to the authority conferred under Section 382.0511(b) of the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, and Texas Natural Resource Conservation Commission Rule 116.116(b) of Regulation VI, the file for Permit No. 1166 is altered. Please attach this letter to your permit.

Your cooperation in this matter is appreciated. If you have further questions, please contact Mr. Jesse R. Alonzo of our Office of Air Quality, New Source Review Division at (512) 239-1098.

Sincerely,



Dan Pearson
Executive Director
Texas Natural Resource Conservation Commission

DP/JA/js

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