

US EPA ARCHIVE DOCUMENT

The City of Austin dba Austin Energy

Sand Hill Energy Center

Prevention of Significant Deterioration Permit for Greenhouse Gas Emissions

PSD-TX-1012-GHG

**Summary of Revisions
And
Responses to Public Comments**

U.S. Environmental Protection Agency, Region 6

September 25, 2014

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I. Summary of the Formal Public Participation Process

The U.S. Environmental Protection Agency, Region 6 (EPA) proposed to issue a Prevention of Significant Deterioration (PSD) permit to the City of Austin dba Austin Energy, Sand Hill Energy Center on August 6, 2014. The public comment period on the draft permit began August 6, 2014 and closed on September 5, 2014. EPA announced the public comment period through a public notice published in the *Austin American Statesman* on August 6, 2014 and on Region 6's website. EPA also notified agencies and municipalities on August 6, 2014 in accordance with 40 CFR Part 124.

The Administrative Record for the draft permit was made available at EPA Region 6's office. EPA also made the draft permit, Statement of Basis and other supporting documentation available on Region 6's website, and at the Austin Public Library, Ruiz Branch, Austin, Texas.

EPA's public notice for the draft permit also provided the public with notice of the public hearing, explaining that it was subject to cancellation if no requests for a hearing were received or if EPA determined that there was not a significant degree of public interest. During the comment period, EPA did not receive a written request for a public hearing on September 16, 2014 and the public meeting was cancelled on August 29, 2014. EPA received a public comment on August 21, 2014 which we respond to below.

Update to Applicability Analysis

On June 23, 2014, the United States Supreme Court issued a decision addressing the application of stationary source permitting requirements to greenhouse gases. *Utility Air Regulatory Group (UARG) v. Environmental Protection Agency* (EPA) (No. 12-1146). The Supreme Court said that the EPA may not treat greenhouse gases as an air pollutant for purposes of determining whether a source is a major source required to obtain a Prevention of Significant Deterioration (PSD) or Title V permit. However, the Court also said that the EPA could continue to require that PSD permits, otherwise required based on emissions of conventional pollutants, contain limitations on GHG emissions based on the application of Best Available Control Technology (BACT). Pending further EPA engagement in the ongoing judicial process before the District of Columbia Circuit Court of Appeals, the EPA is proceeding with this final permitting decision consistent with EPA's understanding of the Supreme Court's decision.

In this final permit decision, the EPA is continuing to apply the PSD BACT requirement to GHG emissions from the Sand Hill Energy Center. This project is otherwise subject to PSD because it emits a regulated NSR pollutant other than GHG (specifically carbon monoxide, and nitrogen oxides) above the major source thresholds. In addition, the proposed source emits or has the potential to emit 75,000 tons per year (tpy) or more of GHG on a carbon dioxide equivalent (CO₂e) basis (*see* 40 C.F.R § 52.21(49)(iv); *PSD and Title V Permitting Guidance for Greenhouse Gases* (March 2011) at 12-13), 1,462,052 TPY CO₂e. Since the Supreme Court recognized EPA's authority to limit application of BACT to sources that emit GHGs in greater than *de minimis* amounts, EPA believes it may apply the 75,000 tons per year threshold in existing regulations at this time to determine whether BACT applies to GHGs at this facility.

Accordingly, this project continues to require a PSD permit that includes limitations on GHG emissions based on application of BACT.

EPA Region 6 continues as a PSD permitting authority for GHG emissions in accordance with the provisions of the FIP that do not conflict with the Court's decision and thus remain in place. The Supreme Court's decision does not limit the authority and responsibility of Region 6 with regard to this particular permitting action. No other changes to the administrative record or Final Permit are warranted as a result of the recent Supreme Court decision.

II. EPA's Response to Public Comments

This section addresses the public comment received by EPA and provides our response to the comment. EPA received 1 comment during the public comment period. The comment was from the Permittee.

1. The Permittee commented:

“Compliance with the two (2) metrics (Btu/KWh and lbs CO₂/MWh) established in the PSD permit are required on an annual basis. There are no short term metrics. Therefore, there is no need to perform testing to determine these metrics at the HRSG exhaust stack as would be required by condition VI. E. Austin Energy believes that the testing requirement identified in Special Condition VI. D., along with the continuous monitoring requirements documented in Special Condition III. A. 2. will be more than adequate to demonstrate compliance with the metrics established in the PSD permit. Based on this position Austin Energy believes Special Condition VI. E. is redundant and unreasonable and would require an unwarranted expense and therefore, should be removed from the permit.”

EPA Response: The permittee will be operating the proposed facility over various load ranges during normal operating conditions (between 50%-100% load). Specifically, the permit at Special Condition III.A.1.c. requires that the permittee perform an initial compliance test at or above 90% of its design capacity to determine compliance with the BACT limit prescribed by the permit. It is also important for the permittee to measure its CO₂ emissions at minimal load operation, since combustion turbines generally achieve lower thermal efficiency, and therefore emit more CO₂ on an output basis, when they operate at lower loads. If the source operates at, or close to, minimal load conditions for an extended period of time, it may be more difficult to comply with the BACT limit. Therefore, Special Condition VI. E. requires the permittee to determine emissions at minimal load during normal operating conditions (i.e., not to include periods of startup and shut down). While the results of the minimal load testing are not used to determine whether the applicant can achieve the BACT limit during the initial compliance testing, determining the expected CO₂ emission rate during the lowest normal load condition will inform the permittee and EPA of the source's ability to comply with the CO₂ emission limit at all normal operational scenarios, even in cases where the source operates at very low loads for an extended period of time. Further, Special Condition VI. E. has been consistently applied to other GHG permits issued by EPA Region 6 for similar facilities. See, for example, La Paloma Energy Center (PSD-TX-955-GHG), Calpine Deer Park Energy Center (PSD-TX-979-GHG), Pinecrest Energy Center (PSD-TX-1298-GHG), Victoria Power Station (PSD-TX-955-GHG), and Lon C. Hill Power Station (PSD-TX-955-GHG). We also recognize that a range of performance testing is generally performed by electric utility companies prior to taking

ownership of the turbines from the vendor to ensure that the turbines are operating as guaranteed. Assuming these tests cover a minimal load operational scenario, there is no need for the permittee to perform additional testing to comply with Special Condition VI. E. Therefore, we are not eliminating Special Condition VI. E. in the final permit.

III. Final Revisions to the Permit

There were no changes made in the Final Permit.

IV. National Historic Preservation Act (NHPA)

On June 3, 2014, EPA sent a letter to the State Historic Preservation Officer (SHPO) requesting concurrence on EPA findings for Austin Energy's cultural survey. The SHPO sent concurrence to the EPA on July 3, 2014.