



Jamie Maddy
Director - Regulatory

May 20, 2013

Sent via email to Cheryl.Bradley@deq.ok.gov

Department of Environmental Quality
Air Quality Division
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677
ATTN: Cheryl E. Bradley

Re: Comments on Proposed Regional Haze SIP Amendment

To Whom it May Concern:

Chesapeake Energy Corporation ("Chesapeake") submits the following comments in support of the Oklahoma Department of Environmental Quality's ("DEQ") proposed revision to Oklahoma's Regional Haze State Implementation Plan ("SIP"). See DEQ Case No. 10-025. Under the Oklahoma Clean Air Act (27A OS §§2-5-101 thru 117), DEQ is given primary authority and responsibility for preparing and implementing the air quality management plan for the State of Oklahoma, compiled in 40 CFR Part 52, Subpart LL. DEQ originally prepared and submitted its Regional Haze SIP in February 2010 in compliance with the federal Clean Air Act and 40 CFR Part 51, Subpart P, Protection of Visibility. On January 27, 2012, the U.S. Environmental Protection Agency ("EPA") partially approved and partially disapproved the Regional Haze SIP. See 76 Fed. Reg. 81,727.

In fact, EPA accepted the majority of Oklahoma's state plan. However, the limited portion of the Oklahoma SIP that was disapproved was rejected principally because of the emission limits set for sulfur dioxide ("SO₂") for six coal-fired electric generating units, including four Oklahoma Gas and Electric ("OG&E") units, and relevantly, two units at the Public Service Company of Oklahoma ("PSO") Northeastern Power Station (Units 3 and 4) in Rogers County, Oklahoma. EPA noted that the "state's cost estimates for SO₂ scrubbers were high in comparison to other units, and [EPA] therefore separately assessed the costs ..." 76 Fed. Reg. 81,727. As a result, EPA concluded that "Oklahoma's costing methodology was not in accordance with RH requirements." Id.

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405-935-3607 • fax 405-849-3607 • Jamie.maddy@chk.com



Consequentially, EPA “proposed a Federal Implementation Plan (“FIP”) to address these defects in BART . . .” which became effective January 27, 2012. Id. Relevantly, “[t]he FIP established

Dry Flue Gas Desulfurization with a Spray Dry Absorber” for PSO’s Northeastern affected units. See Oklahoma Department of Environmental Quality, Air Quality Division, Revised BART Determination, March 19, 2013. However, at the encouragement and request of the Oklahoma Secretary of Environment and the Oklahoma Secretary of Energy, along with the Attorney General of Oklahoma, PSO participated in comprehensive discussions with state officials to develop an Oklahoma centric plan to all of the federal requirements affecting electric generating units with DEQ as the coordinator. See Attachment 1.

As a result, on March 26, 2013, DEQ entered the “First Amended Regional Haze Agreement” to satisfy the Best Available Retrofit Technology (“BART”) requirements associated with the SO₂ and nitrogen oxides (“NO_x”) requirements at PSO’s Northeastern Power Station Units 3 and 4. The proposed SIP revision addresses the disapproved portion of the Regional Haze SIP as it relates to the BART determination for these units. The proposed revision implements relevant portions of a settlement agreement reached among PSO, EPA, the Oklahoma Secretary of Environment, U.S. Department of Justice, and the Sierra Club.

1. The First Amended Regional Haze Agreement is BART Compliant Significantly and Affordably Addresses Regional Haze With Substantial Environmental Benefits
Specifically, under the First Amended Regional Haze Agreement, PSO has committed to install low NO_x combustion technologies and achieve a lower NO_x emissions rate for both Units 3 and 4. In addition, PSO will comply with a new, lower SO₂ emission rate for both Units 3 and 4 in 2014 – and an even lower rate in 2015. Finally, PSO will retire one of the coal-fired generating units at the Northeastern Power Station by April 16, 2016, “and therefore the removal of NO_x, SO₂, PM, and CO₂, emissions from the unit” will also be achieved. Id. These will represent significant emissions reductions that will benefit Oklahoma.

In DEQ’s BART Determination, it was concluded that “[t]hese reductions will help to address local formation and interstate transport of ozone and reduce the contribution to greenhouse gasses and mercury deposition from electricity generation in Oklahoma.” Id. This result strategically addresses regional haze requirements.

Additionally, this plan places actual emissions reductions in place sooner than the FIP would have. In fact, “[t]he FIP scenario provides no further improvement in ozone and would likely assure continued use of coal-fired electricity generation for an additional 20 years beyond the settlement agreement scenario.” Id. Further, the settlement agreement, “while achieving perceptively equivalent visibility improvements at the Class I areas, will not require water usage and in shutting down Northeastern Unit 4 rather than installing additional controls, energy consumption is half that of the control solution established by the FIP.” This plan provides a



litany of environmental benefits for Oklahoma. Decisions regarding emissions controls are as much art as science. Since the modern day version of the federal Clean Air Act was adopted in the early 1970s, decisions have been made without the benefit of absolute certainty. The First Amended Regional Haze Agreement between DEQ and PSO outlines emissions controls and installation schedules designed to meet the BART requirements in a manner that is agreeable to both parties and protective of the environment.

Moreover, this approach provides consistency and predictability to the process. The technology at issue, and the overall compliance plan, has been adequately vetted by engineers and will meet the objectives necessary to comply with BART and related Regional Haze requirements. Accepting this proposal for submission to EPA allows PSO to plan for compliance and address its needs as well as the needs of the ratepayers.

2. The First Amended Regional Haze Agreement Provides an Oklahoma-Centered solution by leaning on Oklahoma resources to reduce power plant emissions and provide reliable electricity. In the original Regional Haze Agreement, it was acknowledged that in the event EPA rejected the SIP as it ultimately did in part, a BART alternative would result in switching one "coal-fired unit to natural gas."

Additionally, EPA has long acknowledged that greater utilization of cleaner burning natural gas is a means for both PSO and OG&E to meet their BART obligations under federal law. From the beginning, this native Oklahoma resource has been a viable, economic solution. This First Amended Regional Haze Agreement will, in part, result in greater utilization of natural gas and, consequently, will have a significant positive impact on Oklahoma's economy.

Given the supply and availability of natural gas in Oklahoma, the use of natural gas-fired power generation will not result in significant rate increases as compared to installing expensive emission control retrofits on aging coal-fired power plants to address regional haze. Oklahoma consistently ranks 3rd in the nation after Texas and Wyoming in the production of natural gas, with production projected to continue to increase significantly over the next decade and beyond. It is right for Oklahoma utilities to lean upon the many benefits of Oklahoma natural gas.

In fact, in the public testimony before the Oklahoma Corporation Commission related to PSO, Steven L. Fate, the Director of Business Operations Support for PSO, acknowledged that greater natural gas consumption, resulting from the First Amended Regional Haze Agreement, is consistent with Oklahoma's energy policies. Mr. Fate estimates that:

[t]he average incremental natural gas production is estimated to be 39 thousand MMBTU from 2027-2040. Assuming an average annual Henry Hub price of natural gas of \$4.37 per MCF, the natural gas volume is valued at approximately \$166 million annually. The value of natural gas times the economic multiplier provides a total output of \$239 million annually in economic activity for the state.

Chesapeake Energy Corporation

P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405-935-3607 • fax 405-849-3607 • Jamie.maddy@chk.com



Rebuttal Test. of Steven L. Fate on behalf of Pub. Serv. Company of Okla., PUD 201200054, at 14.

Oklahoma's Energy Plan calls for a strategy that increases reliance on Oklahoma resources for power generation which, according to the plan, helps preserve Oklahoma's relative low cost of energy and electricity while simultaneously strengthening the economy our air quality. PSO, DEQ, and other Oklahoma's leaders should be commended for developing an Oklahoma strategy of our own, one that benefits our state by meeting federal environmental regulation while utilizing our own natural resources which benefits all Oklahomans and our economy in the immediate and long term.

Chesapeake supports the adoption of the First Amended Regional Haze Agreement.

Respectfully submitted,

A handwritten signature in cursive script that reads "Jamie Maddy".

Jamie Maddy
Director – Regulatory

Chesapeake Energy Corporation

P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405-935-3607 • fax 405-849-3607 • Jamie.maddy@chk.com