Summary of Testimony of Thomas P. Schroedter
Executive Director
Oklahoma Industrial Energy Consumers (OIEC)

- In December 2011, EPA, disapproved portions of Oklahoma's 2010 State Implementation Plan for Regional Haze compliance (Oklahoma SIP) and promulgated a final Federal Implementation Plan (FIP) establishing emission limitations for six coal-fired generating units owned by the investor-owned utilities, OG&E and PSO

- EPA determined that Best Available Retrofit Technology (BART) could only be achieved through installing scrubbers to the six coal units

- In response, OG&E pursued a legal challenge to EPA's FIP, while PSO entered into a settlement agreement with EPA and others to address compliance with EPA's FIP

- PSO's Settlement (and resulting EPA approved Regional Haze SIP) provides for the retirement of one coal unit by April 2016 and the retrofit of the other coal unit with scrubbers by 2026

- OG&E's legal challenge to EPA's FIP was rejected by the 10th Circuit in a 2-1 vote, although the Court previously entered an Order staying the effectiveness of the FIP while the legal challenge was pending

- Following rejection of its legal challenge, OG&E developed a plan for compliance with EPA's Regional Haze FIP, which involves the scrubbing of two of OG&E's five coal-fired units and the conversion of two other coal-fired units to natural gas by 2019

- There is no doubt that OG&E and PSO's environmental compliance with EPA Regional Haze requirements will result in substantial adverse impacts to PSO and OG&E ratepayers

- The first year rate increases for customers of PSO and OG&E are anticipated to be in the range of 11-12%, as compared to the rate impact of the State of Oklahoma's December 2010 SIP

- Based on OIEC's most recent analysis, OG&E's customers are expected to pay in excess of $4.2 billion more on a nominal cost basis over the next 25 years as a result of the RH FIP, when compared to Oklahoma's initial SIP for OG&E's compliance with the FIP

- The economic impact for PSO ratepayers is similar and likewise devastating. It is estimated that PSO ratepayers will expend approximately $5.1 billion more on a nominal basis over the next 25 years for regional haze compliance than what ratepayers would have paid under the Oklahoma SIP

- OG&E Regional Haze FIP compliance plan and PSO's RH SIP will substantially decrease the level of coal-fired generating capacity on PSO and OG&E's systems, exposing Oklahoma ratepayers to a risk of rate shock in the event of natural gas price volatility or supply disruption

- The potential for economic disruption due to EPA regional haze compliance is also significant because of the potential for both rate shock and electric reliability issues. OG&E and PSO rely heavily on their coal-fired generating assets because these assets provide baseload power and are by far the lowest cost energy resources on their systems

- There is also the potential for increased unemployment resulting from increased electric costs as PSO's regional haze compliance could result in job losses of up to 50,000. OG&E ratepayers could experience similar job losses

- The State of Oklahoma already has a disproportionately high energy burden and EPA's regional haze rule will increase these burdens

- Please address these potential harmful impacts to Oklahoma ratepayers and ratepayers impacted in other states by developing a statutory remedy to Clean Air Act/Regional Haze Rule compliance, clarifying that states shall perform any BART analysis and that EPA shall defer to the state's analysis. In addition, ensure that any BART analysis must consider both direct and indirect costs of regional haze compliance and the effects on ratepayers

Testimony of Thomas P. Schroedter
Executive Director
Oklahoma Industrial Energy Consumers (OIEC)

Before the U.S. House of Representatives
Committee on Science, Space and Technology
Subcommittee on the Environment

March 23, 2016 Hearing
Examining EPA's Regional Haze Program: Regulations Without Visible Benefits

My name is Tom Schroedter. I am the Executive Director of Oklahoma Industrial Energy Consumers, otherwise known as "OIEC." OIEC is a non-partisan, unincorporated association of energy intensive manufacturers, refiners and transporters, and other large energy consumers, with facilities located throughout the State of Oklahoma. OIEC member companies employ tens of thousands of Oklahomans.

Many of OIEC's members are engaged in energy price-sensitive industries such as pulp, paper, cement, refining, industrial gases, plastics, food processing, fertilizer, as well as crude oil and refined products transportation and storage.

My testimony will address the impacts of the U.S. Environmental Protection Agency's (EPA) issuance of a final Federal Implementation Plan (FIP) pursuant to the Clean Air Act's Regional Haze Rule, which requires Public Service Company of Oklahoma (PSO) and Oklahoma Gas and Electric Company (OG&E) to add pollution controls to their coal-fired electric generating units in order to comply with EPA's regional haze requirements.

Background

The Clean Air Act requires states to prevent future and remedy existing man-made impairment of visibility in Class I federal areas.[1] The Regional Haze Rule provides that control technologies must meet certain cost-effectiveness tests to protect consumers. In February 2010, the State of Oklahoma submitted a State Implementation Plan (SIP) to EPA identifying how Oklahoma would address the regional haze requirements. The State of Oklahoma determined that six OG&E and PSO coal-fired generating units impacted the Wichita Mountains Wildlife

[1] Clean Air Act Section 169A, 42 U.S.C. Section 7491.

Refuge, which is the only Class I federal area in the State of Oklahoma. That SIP also determined, based upon real-world vendor data, that flue gas desulfurization (scrubbers) was not a cost-effective control technology for meeting regional haze requirements for the six PSO and OG&E coal-fired generating units, and therefore the appropriate Best Available Retrofit Technology (BART) for them was low sulfur coal.

In December 2011, the EPA disapproved portions of Oklahoma's 2010 SIP, rejecting the State's determination that scrubbers were not cost effective, and promulgated a final FIP establishing emission limitations for the six coal-fired generating units that could only be achieved by installing scrubbers, or converting the units to burn natural gas.[2] Following the issuance of the FIP, PSO and OG&E each filed Petitions to Review the FIP with the 10th Circuit Court of Appeals (10th Circuit).

PSO's Response to EPA's FIP

In October 2012, PSO, along with EPA, the Oklahoma Department of Environmental Quality (DEQ), the Sierra Club and the Secretary of Environment for the State of Oklahoma, entered into a Settlement Agreement to address PSO's compliance with the EPA's FIP for regional haze. As part of that Settlement Agreement, PSO agreed to retire one of its coal units in April, 2016, and retrofit the other coal unit with pollution controls, gradually decreasing the annual energy production levels from that unit before finally retiring it in 2026. Pursuant to the Settlement Agreement, PSO's revised Regional Haze Plan was submitted to DEQ for review and approval, and upon receipt of such approval, submitted to EPA for review and approval. PSO's

[2] 76 Fed. Reg. 81728 (Dec. 28, 2011). The Regional Haze Rule BART requirements apply to coal-fired generating units constructed between 1962 and 1977. OG&E's Muskogee Generating Unit Number 6 was completed in 1984 and therefore is not subject to the regional haze BART requirements. All other PSO and OG&E coal units are subject to BART requirements.

revised Regional Haze State Implementation Plan (RH SIP) was approved by EPA on March 7, 2014.[3]

OG&E's Response to EPA's FIP

While PSO pursued its RH SIP, OG&E, Oklahoma's largest investor-owned electric utility with more than 800,000 customers, joined by the State of Oklahoma and OIEC, pursued its Petition to Review in the 10th Circuit. That Petition was rejected by a 2 to 1 vote of a panel of the 10th Circuit, although the court had previously entered an order staying the effectiveness of the FIP while the Petition was pending.[4] Following the 10th Circuit's denial of a Petition for Reconsideration, OG&E, the State of Oklahoma, and OIEC filed a Petition for Certiorari with the United States Supreme Court, which was denied on May 27, 2014.

Following the 10th Circuit and Supreme Court rulings, OG&E developed a plan for its compliance with the Regional Haze FIP. That compliance plan involves the scrubbing of two of OG&E's five coal-fired generating units and the conversion of two other coal-fired generating units to natural gas. The remaining OG&E coal-fired generation unit is not subject to regional haze BART requirements and therefore will be able to continue to operate without scrubbers. OG&E has until January 2019 to comply with the Regional Haze FIP.

Rate and Other Impacts of OG&E and PSO EPA Regional Haze Compliance

While experts may differ as to whether EPA's Regional Haze program will have a perceptible impact on visibility in the Wichita Mountains National Wildlife Refuge, there is no

---

[3] 79 Fed. Reg. 12944 (Mar. 7, 2014).

[4] Oklahoma v. U.S. E.P.A., 723 F. 3d 1201 (10th Cir. 2013). Judge Kelly, in his dissent, noted: "The EPA rejected Oklahoma's cost estimates for scrubbers and provided two options of its own. These options arbitrarily and capriciously (1) assumed OG&E would burn coal they are not burning and have no plans to burn and (2) used scrubbers that do not fit and are not technically feasible." *Id.*, at 1225. Further, he determined that "[t]he EPA rejected Oklahoma's evidentiary support with no clear evidence of its own to support its contrary conclusion." *Id.*

doubt that OG&E's Plan for compliance with EPA's FIP and PSO's RH SIP will result in substantial adverse impacts to PSO and OG&E ratepayers. OG&E's Plan for Compliance with EPA's FIP, and PSO's revised RH SIP, will drive up electricity costs while providing little, if any, benefit to utility ratepayers.

While the Clean Air Act provides broad authority to both states and EPA to develop plans to make reasonable progress to improving visibility in Class 1 federal areas, it is OIEC's belief that the Act does not authorize EPA to replace and supersede the State's authority to determine BART or to ignore the cost-effectiveness test that must be met by control technologies to qualify as BART[5]. Unfortunately, when EPA disapproved the State's determination of BART for PSO and OG&E's six coal-fired generating units, EPA superseded the State's discretion as to how the applicable regional haze standards are to be met. While the State of Oklahoma complied with the step-by-step BART process, EPA determined otherwise when promulgating its FIP for the State of Oklahoma.

There is no doubt that EPA's FIP will result in substantial rate increases for OG&E and PSO ratepayers. For example, an initial analysis conducted by OG&E reflects that EPA's FIP would be $2.4 billion more costly for OG&E ratepayers than Oklahoma's proposed 2010 SIP. Moreover, that same analysis of an alternative scenario referenced in the FIP (conversion of coal-fired power plants to burn natural gas) reflects that the FIP would cost approximately $5.4 billion more than the SIP on a present value basis. Based on OIEC's most recent analysis, OG&E's customers are expected to pay in excess of $4.2 billion more on a nominal cost basis over the next 25 years as a result of EPA's regional haze FIP when compared to the Oklahoma SIP. The initial rate impact of the OG&E compliance plan for EPA's regional haze FIP is

[5] Clean Air Act Section 169A(g)(2), 42 U.S.C. Section 7491(g)(2).

estimated to be approximately $241 million per year which would represent a first year rate increase of approximately 12%.

The economic impact of PSO's RH SIP likewise will have substantial adverse impacts on PSO ratepayers. PSO's RH SIP requires the retirement of PSO's Northeastern 3 coal-fired generating unit in April 2016 (25 years before the end of its useful life), and the retirement of the Northeastern 4 unit by 2026. OIEC estimates that PSO ratepayers will expend approximately $5.1 billion on a nominal basis over the next 25 years for regional haze compliance when compared to what ratepayers would have paid under the Oklahoma SIP.[6] It is estimated that PSO's electric rates will increase by approximately $148 million per year, which would represent a year one rate increase of approximately 11% as a result of the Regional Haze Rule. [7]

These rate hikes will harm industrial consumers of electricity such as OIEC members, and also residential customers and small businesses, and are also expected to have a significant adverse effect on Oklahoma's economy. For OIEC member companies, a major rate increase will impact productivity, stifle expansion and, in a worst case scenario, drive energy-intensive businesses to states that offer more favorable electricity rates or to foreign countries. Unfortunately, such a result was not considered in EPA's analysis of the cost effectiveness of regional haze control alternatives and in EPA's imposition of its FIP.

Moreover, the potential for economic disruption due to the Regional Haze Rule is significant because of the possible potential for rate shock and electric reliability ramifications. Both OG&E and PSO have relied heavily on their coal-fired generating assets to produce baseload power because these assets are the lowest cost resources on their systems.

[6] Responsive testimony of OIEC witness Scott Norwood filed in OCC Case No. PUD201200054 (Jan. 2013).
[7] Comments of Oklahoma Industrial Energy Consumers on the March 20, 2013 [Proposed] Revision of Regional Haze State Implementation Plan, p. 8 (May 17, 2013).

Unfortunately, EPA's approval of PSO's RH SIP will decrease the level of coal-fired generating capacity on PSO's system from 40% to 3%.[8] The resulting decline in fuel diversity has clear disadvantages for Oklahoma in that it exposes Oklahoma ratepayers to a risk of rate shock in the event of natural gas price volatility in the future or supply disruptions. Moreover, when the first PSO coal-fired unit is retired next month, the Company must purchase or build additional capacity to replace the void of 470 MW of retired capacity, which could potentially result in decreased system reliability unless these retired MW are replaced entirely for the remaining life of the retired units. If the company replaces all of that capacity, its customers will bear the cost of the replacement capacity in addition to much higher replacement energy costs and all of the other costs associated with implementing PSO's RH SIP.[9]

There is also the potential for increased unemployment. Based on figures from the U.S. Bureau of Labor Statistics and Management Information Services, Inc., PSO's RH SIP could result in the loss of up to 50,000 jobs in Oklahoma, which would increase Oklahoma's unemployment.[10]

Finally, electric utility price increases of the magnitude discussed earlier in my testimony will impose real burdens on Oklahoma's citizens. The following points highlight the energy impacts on Oklahoma households:

- Oklahoma households spend an average of 12% of their after-tax incomes on energy;
- 827,000 Oklahoma households earning less than

[8] Comments of the Consumer Coalition of Oklahoma, p. 6, to EPA Docket No. EPA-R06-OAR-2013-0227 (Sep. 20, 2013) (Consumer Coalition Comments).
[9] Oklahoma Attorney General Comments, p. 3, to EPA Docket No. EPA-R06-OAR-2013-0227 (Sep. 20, 2013.
[10] Consumer Coalition Comments, p. 6.

$ 50,000 per year (roughly 60% of households) spend 21% of their after-tax incomes on energy;

- 381,000 Oklahoma households with annual incomes of $10,000 to $30,000 (more than 25% of the State's population) spend 25% of their after-tax income on energy; and
- The 134,000 poorest Oklahoma households with annual incomes of less than $10,000 spend upwards of 60% of their after-tax income on energy.[11]

The bottom line is that the State of Oklahoma already has a disproportionately high energy burden, and the Regional Haze Program will increase these burdens, which will have related economic and personal consequences.

Conclusion

Please address these harmful impacts which will result from EPA's regional haze requirements by developing a statutory remedy to the Clean Air Act/Regional Haze Rule, clarifying that states shall perform any BART analysis and EPA should not second-guess that analysis. In addition, please ensure that any BART analysis consider both direct and indirect costs of regional haze compliance and the effects on ratepayers

Thank you for the opportunity to present this testimony.

2645097.2:620435:00725

[11] Consumer Coalition Comments, p. 7.

Thomas P. Schroedter
Biographical

Thomas P. Schroedter serves as Executive Director and General Counsel of Oklahoma Industrial Energy Consumers (OIEC), an unincorporated association of Oklahoma manufacturing, refining and other companies that consume significant quantities of energy to operate their Oklahoma facilities. Mr. Schroedter represents OIEC in regulatory proceedings before the Oklahoma Corporation Commission and in dockets before the Federal Energy Regulatory Commission.

Mr. Schroedter has served as OIEC's executive director for more than 15 years, advocating for reliable and lowest, reasonable cost energy supply for OIEC member companies. Mr. Schroedter represents OIEC in state and federal courts and at the Oklahoma State Legislature and advises OIEC members on electric power and natural gas issues impacting the delivery and cost of energy to industrial end-use consumers.

As a shareholder in the Tulsa-based law firm Hall Estill, Mr. Schroedter also provides legal representation to other firm clients in connection with the exploration, production, transportation and consumption of energy, including advice and analysis regarding state and federal electric power and natural gas issues impacting the rates and terms of delivery of energy to end-use customers.

Mr. Schroedter has served as an adjunct professor at the University of Tulsa College of Law, teaching courses in oil and gas contracts and transactions. He has also been appointed to several state legislative commissions, including Oklahoma's Oil and Gas Production Practices Commission, Oklahoma's Commission on Natural Gas Policy, Oklahoma's Clean Energy Independence Commission, and Arkansas' Task Force concerning EPA's greenhouse gas rules.