

# Exhibit 1

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## REGIONAL HAZE PROPOSAL

Oklahoma Gas and Electric Company (OG&E) submits this proposal to help the State of Oklahoma satisfy the standards established in the federal Clean Air Act for the improvement of visibility in national parks and wilderness areas (or Class I areas). The Clean Air Act requires the state, over approximately a 50-year period, to move toward the elimination of man-made impacts on visibility in Class I areas. For purposes of the OG&E facilities, the relevant Class I areas are Wichita Mountains National Wildlife Refuge, Caney Creek Wilderness Area, Hercules Glades Wilderness Area and Upper Buffalo Wilderness Area. EPA set the year 2064 as the deadline for achieving the target of no man-made impact on visibility in Class I areas.

### **Background and Process**

The initial step that Oklahoma must take to meet the Clean Air Act target is the development of a set of rules that require certain sources to install Best Available Retrofit Technology (BART) by 2018. In addition to requiring BART, the rules have to demonstrate that Oklahoma is making reasonable progress toward achieving the target of no man-made visibility impact established by the Clean Air Act. After the state adopts the rules, they will be submitted to EPA for approval as part of the state implementation plan (SIP) under the Clean Air Act.

In May 2008, OG&E submitted BART evaluations for its affected generating units at Muskogee, Seminole and Sooner Stations. The units at Seminole Station use natural gas as their fuel and the affected units at Muskogee and Sooner Stations, which are Muskogee Units 4 and 5 and Sooner Units 1 and 2, are coal-fired.

The BART evaluations address two different types of emissions from these units that have the potential to affect visibility. The first type of emission addressed in the BART evaluation is nitrogen oxides or NO<sub>x</sub>. The BART evaluations conclude that OG&E should install low NO<sub>x</sub> combustion technology to minimize the creation of NO<sub>x</sub> during combustion. One of the five factors considered in selecting BART is the cost effectiveness of available control technologies. The low NO<sub>x</sub> combustion techniques are cost effective, ranging from \$233 to \$270 per ton of NO<sub>x</sub> removed annually at the coal-fired units at Muskogee and Sooner stations. The NO<sub>x</sub> control measures proposed as BART for the gas-fired units at Seminole will cost \$1,675 per ton of NO<sub>x</sub> removed annually. OG&E understands that the DEQ agrees with the proposed BART determination for NO<sub>x</sub> at the affected Seminole, Sooner and Muskogee units.

The second type of emission addressed in the BART evaluation is sulfur dioxide or SO<sub>2</sub>. EPA established a presumptive BART emission rate for the coal-fired units at Muskogee and Sooner of 0.15 pounds of SO<sub>2</sub> emissions per million BTUs of heat input. This emission rate can be achieved with the installation of dry flue gas desulfurization, which also is known as a scrubber. For units that are the size of OG&E's, EPA estimated that sources could install scrubbers at an average cost of \$919 per ton of SO<sub>2</sub> removed annually, and EPA anticipated that the costs would range from \$400 to \$2000 per ton of SO<sub>2</sub> removed annually.

The presumptive BART emission rate for SO<sub>2</sub> does not apply if one performs a complete analysis of the five factors used to establish BART and determines a specific BART emission rate for the unit that considers its particular characteristics and circumstances. The BART analysis for the affected units at Muskogee and Sooner concludes that those units are different because they burn low sulfur coal that dramatically changes the cost effectiveness equation. For these units, scrubbers would have an average cost of \$10,078 per ton of SO<sub>2</sub> removed annually (approximately ten times the average cost of \$919 per ton estimated by the EPA), and the costs would range from \$9,625 to \$10,883 per ton of SO<sub>2</sub> removed annually depending on the particular unit. As a result, the BART evaluation concluded that scrubbers were not cost effective and recommended emission limits that require the units to continue burning low sulfur coal.

In the report from Sargent & Lundy that OG&E submitted to the DEQ on September 17, 2009 ("S&L Report"), the capital cost for scrubbers at the affected coal units (computed in accordance with EPA standards) was \$1.527 billion. OG&E believes that, at \$1.527 billion, this would be the largest privately-funded capital project in the history of the State of Oklahoma. Besides the capital costs, and as shown in the S&L Report, OG&E expects to incur approximately an additional \$150 million annually to operate and maintain the scrubbers. For OG&E to recover these additional capital and operating costs along with the costs of NO<sub>x</sub> controls, OG&E estimates that its rates to all customers would need to be increased approximately \$425 million annually, of which approximately \$365 million would need to be borne by OG&E's Oklahoma customers. While OG&E cannot estimate with precision the direct and indirect impacts on the Oklahoma economy of a \$365 million annual increase in OG&E's electric rates, such rate increase would be the largest increase in the history of Oklahoma.

## Visibility Impacts

Visibility is measured in a unit called a "deciview," which is basically a change in visibility that the human eye can detect. EPA's regional haze rules adopt a computer model for assessing visibility impacts. The model predicts a visibility impact measured as a change in deciviews ( $\Delta$ -dv) in a particular Class I area that results from a particular unit's emissions. According to EPA, a source that is predicted to cause an impact greater than 1.0  $\Delta$ -dv is deemed to "cause" a visibility impact, and a source that is predicted to cause an impact greater than 0.5  $\Delta$ -dv is deemed to "contribute to" a visibility impact. With regard to  $\text{NO}_x$ , OG&E is proposing to install technology on the affected Seminole, Muskogee and Sooner units that has been modeled to limit the units' visibility impact to 0.14  $\Delta$ -dv or less for  $\text{NO}_x$  at each of the Class I areas.

For  $\text{SO}_2$ , the visibility impact model predicts that using low sulfur coal will still allow visibility impacts over 1.0  $\Delta$ -dv at three of the four Class I areas with the highest predicted impact being 1.471  $\Delta$ -dv. If OG&E installed scrubbers on all four units, the model predicts that the visibility impact would be decreased to less than 0.20  $\Delta$ -dv at each of the Class I areas. The BART portion of the regional haze rules, however, does not require emission controls that are not cost effective even if a source has an impact on visibility. And while the rules require a state to demonstrate that it is making reasonable further progress toward the goal of no man-made impact on visibility by 2064, EPA has stated that states have wide latitude in determining additional requirements for sources to achieve the reasonable progress goals. Here, too, cost effectiveness is one of the factors that states must consider in establishing these requirements.

As noted above, OG&E is convinced that the installation of scrubbers at the affected units is not BART as scrubbers would not be cost effective. OG&E is aware that potentially the DEQ and the EPA would not agree with OG&E's conclusion and, as a result, would seek to require OG&E to install scrubbers. In that event, OG&E believes that its only course would be to litigate the DEQ's and/or EPA's determination that scrubbers for OG&E's affected units are BART.

As an alternative, OG&E is proposing to control  $\text{SO}_2$  emissions in three steps that are consistent with the state's reasonable progress goals of no man-made impact on visibility by 2064. In the first step, OG&E will limit  $\text{SO}_2$  emissions from the affected units at Muskogee and Sooner to a level that will not "cause" a visibility impact. In the second step, OG&E will limit

SO<sub>2</sub> emissions from the units at Muskogee and Sooner to a level that both will not cause and will not contribute to a visibility impact. In the final stage, OG&E will limit SO<sub>2</sub> emissions from the units at Muskogee and Sooner to a level that would be attained through the use of scrubbers.

### **Timing**

If Oklahoma does not have a SIP for regional haze that is approved by EPA before January 15, 2011, then EPA may issue a federal implementation plan (FIP). Once a SIP or FIP is in place, it will require BART controls to be installed as soon as practicable but no later than five years from the effective date. OG&E is proposing to implement all of the measures that constitute BART by the earlier of January 1, 2016 or four years after SIP approval.

There are two relevant milestones for evaluating whether Oklahoma is on the reasonable progress glide path toward the 2064 target of no man-made impacts on Class I areas. The first milestone is in 2018, which is the end of the period that the SIP is supposed to address. OG&E is proposing measures that will limit SO<sub>2</sub> emissions from the affected units at Muskogee and Sooner so that they do not "cause" a visibility impact greater than 1.0  $\Delta$ -dv by 2016. The second milestone is in 2028 when Oklahoma will be required to demonstrate again that it is on the reasonable progress glide path. OG&E is proposing measures that will limit SO<sub>2</sub> emissions from the units at Muskogee and Sooner so that they do not "cause" or "contribute to" a visibility impact greater than 0.5  $\Delta$ -dv by 2021 and so that they are equivalent to emissions if scrubbers had been installed by 2026. These proposals should sufficiently support Oklahoma's required showing of reasonable further progress.

### **Proposal**

OG&E has developed a proposal to address SO<sub>2</sub> emissions that OG&E believes can be adopted by DEQ as a reasonable further progress goal under the regional haze rules. The proposal is based on a step-wise lowering of annual SO<sub>2</sub> emission limits to achieve concrete visibility results and, ultimately, the same visibility improvement that scrubbers would achieve. Absent new control technology or different fuel with substantially lower SO<sub>2</sub> emissions, the proposal will require the installation of scrubbers at all four affected units. The proposal is based on OG&E's expectation that the cost effectiveness of measures to address SO<sub>2</sub> emissions will improve in the future. If the cost effectiveness does not improve, the proposal gives OG&E the

ability to ask DEQ to adopt alternative limits. To be effective, the proposal would have to be adopted by DEQ as part of the state implementation plan for regional haze and subsequently approved by EPA. OG&E reserves all of its rights in the event this proposal is not so approved.

OG&E proposes that DEQ should include these emission limits in the regional haze SIP:

- i. Beginning on the earlier of January 1, 2016 or four years after SIP approval, OG&E would reduce NO<sub>x</sub> emissions to 0.15 lb/mmBtu as proposed in the BART determination. The NO<sub>x</sub> emission rate is based on installation of low NO<sub>x</sub> burners and overfire air. OG&E would limit SO<sub>2</sub> emissions from all four affected coal-fired units to 0.65 lb/mmBtu on a 30-day rolling average basis and 0.55 lb/mmBtu on a 365-day rolling average. OG&E also would accept the following annual limits on SO<sub>2</sub> emissions from Sooner 1 and Sooner 2 combined and from Muskogee 4 and Muskogee 5 combined:

	Muskogee 4 and 5 Combined Annual SO <sub>2</sub> Limit (tons/year)	Sooner 1 and 2 Combined Annual SO <sub>2</sub> Limit (tons/year)
Year 1	18,096	19,736
Year 2	16,635	19,318
Year 3	15,174	18,900
Year 4	13,713	18,482
Year 5	12,252	18,064

These annual limits are consistent with the modeled 98th percentile Δ-dv impact for SO<sub>2</sub> emissions from each station being less than 0.75 at each of the four relevant Class I areas. This level was selected because a 1.0 Δ-dv impact is the level at which EPA deems a source to be causing a visibility impact. By limiting emissions to these levels, OG&E will be operating in a manner that does not cause a visibility impact in a Class I area. The limits for Sooner represent a 42% to 46% reduction from the baseline emissions of 34,071 tons per year used in the visibility model in the BART determination. The limits for Muskogee represent a 49% to 65% reduction from the 35,640 tons per year baseline used in the visibility model in the BART determination.

- ii. Beginning on the earlier of January 1, 2021 or 9 years after SIP approval, OG&E would continue the NO<sub>x</sub> control measures and SO<sub>2</sub> rolling average emission rates described in Part (i) and would limit annual SO<sub>2</sub> emissions from Sooner 1 and Sooner 2 combined to a total of 17,646 tons per year and from Muskogee 4 and Muskogee 5 combined to a total of 12,064 tons per year. These annual limits are

consistent with the modeled 98th percentile  $\Delta$ -dv impact for SO<sub>2</sub> emissions from each station being less than 0.50 at each of the four relevant Class I areas. This level was selected because it is the level at which EPA deems a source to be contributing to a visibility impact. By limiting emissions to these levels, OG&E will be operating in a manner that does not cause or contribute to a visibility impact in a Class I area. The limit for Sooner represents a 48% reduction from the baseline emissions of 34,071 tons per year used in the visibility model in the BART determination. The limit for Muskogee represents a 66% reduction from the 35,640 tons per year baseline used in the visibility model in the BART determination.

- iii. Beginning on the earlier of January 1, 2026 or 14 years after SIP approval, OG&E would continue the NO<sub>x</sub> control measures and SO<sub>2</sub> rolling average emission rates described in Part (i) and would limit annual SO<sub>2</sub> emissions from Sooner 1 and Sooner 2 combined to a total of 6,000 tons per year and from Muskogee 4 and Muskogee 5 combined to a total of 4,000 tons per year. These annual limits are consistent with the modeled 98th percentile  $\Delta$ -dv impact for SO<sub>2</sub> emissions from each station being less than 0.20 at each of the four relevant Class I areas. This level was selected because it is the modeled visibility improvement that would be achieved by installing dry flue gas desulfurization on all four of the units. By limiting emissions to these levels, OG&E will be operating in a manner that protects visibility to the same degree that dry flue gas desulfurization would. The limit for Sooner represents a 82% reduction from the baseline emissions of 34,071 tons per year used in the visibility model in the BART determination. The limit for Muskogee represents a 88% reduction from the 35,640 tons per year baseline used in the visibility model in the BART determination.

OG&E may propose alternative emission limits that are consistent with achieving the same improvement in modeled visibility impacts. OG&E can comply with the SO<sub>2</sub> emission limits either by installing emission controls, reducing coal combustion, using coal with a lower sulfur content or using alternative fuels with lower sulfur content. To the extent that OG&E complies with the SO<sub>2</sub> emission limits by reducing coal combustion or using alternative fuels, there could also be a reduction in CO<sub>2</sub> emissions from Sooner and Muskogee. If OG&E believes that the emission limits provided in Part (ii) or Part (iii) cannot be achieved in a cost effective manner, OG&E will provide a report to DEQ no less than two years before the deadline for achieving such emission limit, and the report shall identify costs necessary to achieve the prescribed limit and propose an alternative limit that can be achieved in a cost effective manner. OG&E will be required to meet the prescribed emission limits unless DEQ approves the alternate limits proposed in the report.