### BEFORE THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

IN THE MATTER OF: Kansas City Power and Light Company P. O. Box 418679 Kansas City, MO 64141-9679 Source Identification Number: 1070005

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Case No.

# REGIONAL HAZE AGREEMENT

The parties hereto, the Kansas Department of Health and Environment and Kansas City Power and Light Company, having agreed that entry of this Regional Haze Agreement, hereinafter Agreement, is in the best interest of the parties and the public health and the environment, hereby represent and state as follows:

### **JURISDICTION**

- 1. The Kansas Department of Health and Environment is a duly authorized agency of the State of Kansas created by an act of the legislature.
- 2. The Secretary of the Kansas Department of Health and Environment, hereinafter KDHE, has general jurisdiction over matters involving the environment and the public health and safety of the people of Kansas, K.S.A. 65-101 et seq., including general jurisdiction of matters involving air quality pursuant to the Kansas Air Quality Act, K.S.A. 65-3001 et seq.
- 3. Kansas City Power and Light Company, hereinafter KCP&L, is a Missouri Corporation registered to do business in Kansas in accordance with Kansas laws and is subject to K.S.A. 65-3001 et seq. and the regulations adopted thereunder, and is the legal and rightful owner of the facilities listed in paragraph 19.
- 4. Pursuant to K.S.A. 65-3005, the Secretary has authority and jurisdiction to issue this Agreement and to enforce the same. In any action by KDHE to enforce the terms of this Agreement, KCP&L agrees not to contest the authority or jurisdiction of the Secretary to issue this Agreement.
- 5. The terms of this Agreement shall be construed in accordance with the applicable laws of the state of Kansas and the United States.

### STATEMENT OF PURPOSE

6. In entering into this Agreement, it is the mutual objective of KDHE and KCP&L to reduce contributions of emissions by the units listed in paragraph 19 to regional haze; and to establish a schedule by which KCP&L will achieve regulatory compliance and reductions in emissions of air pollutants by making modifications to or installing operating equipment, and/or air pollution control devices. This Agreement establishes enforceable emissions limits pursuant to KDHE's requirement to comply with the regional haze regulations (RHR) identified below in this Agreement which require the installation of Best Available Retrofit Technology (BART) to applicable emission sources. This Agreement is not the result of any

enforcement action or alleged non-compliance with any law, regulation, permit, or order and will enable KCP&L to timely comply with established EPA and KDHE deadlines for compliance with RHR and other unforeseen requirements.

### PARTIES BOUND

- 7. This Agreement shall apply to and be binding upon the parties, their agents, successors, and assigns and upon all persons, contractors, and consultants acting under or for either the KDHE or KCP&L or both.
- 8. The parties agree to undertake all actions required of them by the terms and conditions of this Agreement.
- 9. Notwithstanding the terms of any contract, KCP&L is responsible for compliance with this Agreement, and for insuring that its contractors and agents comply with this Agreement.
- 10. The activities conducted under this Agreement are subject to approval by KDHE. KCP&L shall make all reasonable efforts to provide all necessary information consistent with this Agreement requested by KDHE.

### LIABILITY

11. Nothing in this Agreement shall be considered an admission of any fact or acknowledgment of any liability by any party, nor shall anything in this Agreement be considered an admission of any fact or acknowledgment of any violation of any law, regulation, permit or order but will enable KCP&L to timely comply with established EPA and KDHE deadlines for compliance with the RHR and other unforeseen requirements. Neither the State of Kansas, nor any agency thereof shall be held out as a party of any contract entered into by KCP&L in carrying out activities pursuant to this Agreement.

### FINDINGS OF FACTS

- 12. In 1977, the U.S. Congress adopted §169 of the Clean Air Act (CAA) to protect visibility from impairment in areas of great scenic importance, which were designated as Class I Areas. Visibility impairment is also referred to as regional haze. The CAA specified that emission limitations be developed by the U.S. Environmental Protection Agency (EPA) to include pollutants that emanate from a variety of sources including fossil-fuel fired electric generating power plants having a total generating capacity in excess of 750 megawatts. In 1980, EPA promulgated regulations at 40 FR 80084 to address regional haze that is reasonably attributable to a specific source or a small group of sources. States where Class I sources are located were to determine which existing stationary facilities should install BART to control pollutants which impair visibility. The CAA Amendments of 1990 added §169B with additional requirements for EPA research and rulemaking on regional haze.
- 13. In 1999, EPA issued amendments to 40 CFR Part 51, Subpart P (51.300 309) to further define which facilities were subject to the requirements of the regional haze program and included sources within the State of Kansas. These regulations and subsequent guidance documents require Kansas to achieve goals for improving visibility at Class I Areas. The

goals are to be developed by states where Class I Areas are located and are to be implemented by states from which the pollutants emanate. This requires the development and implementation of long-term strategies for reducing emissions of air pollutants that cause visibility impairment. After a consultative process between the states, tribes, and federal land managers of the Class I Areas, the goals and strategies must be incorporated into a Regional Haze State Implementation Plan (SIP).

- 14. On June 15, 2005, EPA amended the 1999 regional haze regulations and finalized guidelines to:
  - A. identify which BART-eligible facilities would be subject to BART,
  - B. establish presumptive emissions limits to implement BART at coal-fired electrical generating units (EGUs) greater than 750 megawatts,
  - C. determine the level of control technology required to implement BART at each source, and
  - D. require submittal of the Regional Haze SIP no later than December 17, 2007, for approval by the EPA.
- 15. The presumptive emission limits for the La Cygne coal-fired electric generating units established by 40 CFR Part 51, Appendix Y are as follows:
  - A. SO<sub>2</sub> 0.15 lb/mmBtu
  - B. NOx- 0.23 lb/mmBtu (dry-bottom wall-fired)
  - C. NOx- 0.10 lb/mmBtu (cyclone)
- 16. Kansas worked jointly with stakeholders, including KCP&L and other industry members, states, tribes, EPA, and the Central Regional Air Planning Association (CENRAP) to provide for the placement of monitors, develop a shared emission inventory, and conduct visibility modeling to identify strategies to reduce regional haze impacts on Class I Areas.
- 17. In September 2002, KDHE requested information confirming dates of construction and operating information for emission units potentially subject to BART requirements from KCP&L. KCP&L responded appropriately by providing the data requested. KDHE concluded that the following emission units owned and operated by KCP&L were BART-eligible:

La Cygne Units 1 and 2 (1070005)

Unit 1 is a cyclone-fired, wet bottom boiler that uses coal as the primary fuel with a gross generation of approximately 893 megawatts (MW). Operation began in 1973. Unit 1 has wet scrubbers to control sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM), and overfire air to control oxides of nitrogen (NO<sub>x</sub>). The Class I operating permit for this unit limits the emissions of SO<sub>2</sub> to 3.0 lb/mmBtu. The Acid Rain permit for this unit limits the emission of NO<sub>x</sub> to 1.04 lb/mmBtu under an approved NO<sub>x</sub> averaging plan under the Acid Rain Program.

Unit 2 is a wall-fired, dry bottom boiler that uses coal as the primary fuel with a gross generation of approximately 685 MW. Operation began in 1977. Unit 2 has dual-register burners to control NOx and an electrostatic precipitator (ESP) to control PM. The Class I operating permit for this unit limits the emissions of SO2 to 0. 80 lb/mmBtu for liquid fossil fuel and 1.2 lb/mmBtu for solid fossil fuel. When different fossil fuels are burned simultaneously, the SO<sub>2</sub> limit is determined by 40 CFR 60.43(b). The emission of NOx is limited to 0.30 lb/mmBtu for liquid fossil fuel and 0.70 lb/mmBtu for solid fossil fuel. When different fossil fuels are burned simultaneously, the NOx limit is determined by 40 CFR 60.44(b).

- 18. On August 3, 2005, KDHE requested the 24-hour 3-year maximum average emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>10</sub> from facilities determined to be BART-eligible in order to make an initial determination regarding these facilities becoming "subject to BART." KCP&L responded appropriately by providing the data requested.
- 19. KDHE used the data provided by KCP&L to conduct preliminary dispersion modeling of the BART-eligible units using the CALPUFF software. The modeling indicated that the following BART-eligible units would create a greater than 0.5 deciview impact for at least one day during the three-year period modeled at a Class I Area:

La Cygne Units 1 and 2 (1070005)

- 20. On June 13, 2006, KCP&L was informed by KDHE that the BART-eligible units listed in paragraph 19 are subject to the requirements 40 CFR Part 51, Subpart P and must conduct a BART determination, also known as the statutory factor analysis for BART controls, pursuant to 40 CFR 51.302. Each of these units must either:
  - A. commit to installing emission controls and implementing operating procedures which result in achieving the applicable presumptive limits prescribed by 40 CFR Part 51, Appendix Y, or
  - B. complete a detailed, in-depth modeling effort which results in reconsideration of the "subject to BART" status of the facility by showing that a given unit would not create a greater than 0.5 deciview impact at a Class I Area on more than 2% of the days in a three year period.
- 21. KCP&L elected to conduct refined modeling to evaluate a control strategy that will achieve equal to or greater emission reductions than would be achieved with the application of presumptive emission limits at the units listed in paragraph 19. The control strategy with the emission limits in paragraph 23 will achieve emission reductions greater than would be achieved with the application of presumptive emission limits at the units listed in paragraph 19.

## AGREEMENT & COMPLIANCE PLAN

22. The terms of this Agreement constitute an agreement pursuant to K.S.A. 65-3005 to satisfy future regulatory requirements imposed by the RHR and BART requirements. Nothing in this Agreement shall constitute or be construed as a release for any claim or cause of action

- for any New Source Review (NSR) or New Source Performance Standards (NSPS) liability under the Clean Air Act.
- 23. KCP&L and KDHE agree that these emission limits for La Cygne Units 1 and 2 will meet or be less than the presumptive emission limits established by 40 CFR Part 51, Appendix Y, averaged for Units 1 and 2. Unless otherwise specified in this Agreement, within 5 years of EPA's approval of the Kansas Regional Haze State Implementation Plan, KCP&L agrees to install the emissions control and process equipment as expeditiously as possible, as required by 40 CFR 51.308(e)(1)(iv) and in subparagraph E below, and to implement any necessary operating procedures in order to achieve the following:
  - A. Nitrogen Oxides (NO<sub>x</sub>): 0.13 lb/mmBTU based on a 30-day rolling weighted average of both Units 1 and 2, excluding periods of startup and shutdown. During an extended outage of La Cygne Unit 2 (duration in excess of 10 weeks), KCP&L will submit a plan for Unit 1 to KDHE to achieve compliance with the presumptive NOx limit of 0.10 lb/mmBTU on a 30-day rolling average excluding periods of startup and shutdown.
  - B. Sulfur Dioxide (SO<sub>2</sub>): 0.1 lb/mmBTU on a 30-day rolling average of both Units 1 and 2, excluding periods of startup and shutdown.
  - C. PM<sub>10</sub> filterable: 0.015 lbs/mmBTU, based on either an average of 3 one-hour stack tests annually using an approved test method for filterable PM<sub>10</sub>, or KCP&L will comply with KDHE approved Continuous Assurance Monitoring (CAM) plan for PM<sub>10</sub> filterable before baghouses go online for La Cygne Unit 1 and La Cygne Unit 2, at the discretion of KCP&L.
  - D. PM<sub>10</sub> total: 0.024 lbs/mmBTU, based on either an average of 3 one-hour stack test annually, using an approved test method for filterable PM<sub>10</sub> and Method 202 or an approved test method for condensable PM as modified to remove artifact bias subject to KDHE approval, or KCP&L will comply with the KDHE approved CAM plan for PM<sub>10</sub> total before baghouses go online for LaCygne Units 1 and 2, at the discretion of KCP&L.
  - E. Schedule: KCP&L will issue a Request For Proposals (RFP) for equipment needed to achieve the aforesaid emissions limits by December 31, 2008. The RFP will request that construction commence by December 31, 2010. KCP&L will install and operate BART as expeditiously as practical, but in no event later than 5 years after approval of the SIP or June 1, 2015, which ever date occurs first.
- 24. KCP&L agrees to minimize excess emissions of air pollutants during startup, shutdown and malfunction situations by committing to the following actions:
  - A. During startup, pollution control equipment will be activated as soon as practical, within the manufacturer's recommendations or following best engineering practices in the industry;

- B. During shutdown, pollution control equipment will be operated as long as practical, within the manufacturer's recommendations or following best engineering practices in the industry;
- C. Good combustion and operating practices will be utilized to minimize excess air pollutant emissions during all startup, shutdown and malfunction conditions.
- 25. KCP&L agrees to perform compliance verification procedures and recordkeeping requirements in accordance with 40 CFR 51.308(e)(1)(v) and 40 CFR Part 51, Appendix Y.
- 26. The emission limits in this Agreement will be incorporated into any construction or operating permits issued to KCP&L for La Cygne Units 1 and 2.
- 27. This Agreement shall be proposed by the State of Kansas for incorporation into the aforementioned Regional Haze State Implementation Plan.

### CONCLUSIONS OF LAW

- 28. KCP&L is a person within the meaning of K.S.A. 65-3002(i).
- 29. K.S.A. 65-3003 provides that the responsibility for air quality conservation and control of air pollution is hereby placed with the Secretary of Health and Environment and that the Secretary shall administer this act through the Division of Environment. K.S.A. 65-3005 provides that the Secretary shall have the power to: (c) issue such orders, permits and approvals as may be necessary to effectuate the purposes of this act and enforce the same by all appropriate administrative and judicial proceedings and (p) enter into contracts and agreements with other state agencies or subdivisions, municipalities, the federal government or its agencies, or private entities as is necessary to accomplish the purposes of the Kansas Air Quality Act. K.S.A. 65-3011 provides that the Secretary may issue an order requiring action to implement a compliance plan.

# BEST PROFESSIONAL JUDGMENT

30. The requirements of this Agreement represent the best professional judgment of KDHE at this time based on the available information. If circumstances change significantly so that data related to the commitments of this Agreement indicates an imminent threat of danger to the public health or safety or the environment or a significantly different threat other than the issues addressed herein, then KDHE reserves the right to modify dates or requirements herein as it deems reasonably necessary to comply with the regional haze regulations, provided that KDHE give KCP&L at least 90 days notice and an opportunity to submit a compliance schedule after the notice period. KCP&L further reserves the right to appeal any such modifications or additional requirements, in accordance with paragraph 33.

## FORCE MAJEURE, EXCUSABLE DELAY, MODIFICATION

- 31. The following shall constitute the governing terms for force majeure, excusable delay, and modification of the Agreement.
  - A. KCP&L shall perform the requirements under this Agreement within the time limits set forth herein unless the performance is prevented or delayed solely by events which constitute a force majeure. For purposes of this Agreement a force majeure is defined as any event beyond the control of KCP&L which could not be overcome by due diligence and which delays or prevents performance by a date required by this Agreement. Such events do not include increased costs of performance or changed economic circumstances. Any delay caused in whole or in part by action or inaction by municipal, state, or federal regulatory authorities or third parties unrelated to KCP&L shall be considered a force majeure and shall not be deemed a violation of any obligations required by this Agreement.
  - B. KCP&L shall have the burden of proving all claims of force majeure. Failure to comply by reason of force majeure shall not be construed as a violation of this Agreement.
  - C. KCP&L shall notify KDHE in writing within ten (10) days after becoming aware of an event which KCP&L knew, or reasonably should have known, constituted force majeure. Such notice shall estimate the anticipated length of delay, its cause, measures to be taken to minimize the delay, and an estimated timetable for implementation of these measures. Failure to comply with the notice provision of this section may constitute a waiver of KCP&L's right to assert a force majeure claim and may be grounds for KDHE, at its sole discretion, to deny KCP&L an extension of time for performance.
  - D. Within ten (10) days of the receipt of written notice from KCP&L of a force majeure event, KDHE shall notify KCP&L of the extent to which modifications to this Agreement are necessary. In the event that KDHE and KCP&L cannot agree that a force majeure event has occurred, or if there is no agreement on the length of the extension, the dispute shall be resolved as set forth in a paragraph 33.
  - E. Any modifications to any provision of this Agreement shall not alter the schedule for performance or completion of other tasks required by this Agreement, unless specifically agreed to by the parties in writing and incorporated into this Agreement.
  - F. This Agreement may be amended by mutual agreement of KDHE and KCP&L. Such amendments shall be in writing, shall have as their effective date the date on which they are signed by both parties, and shall be incorporated into this Agreement.

## DISPUTE RESOLUTION

32. The parties recognize that a dispute may arise between them regarding implementation of the action to be taken as herein set forth or other terms or provisions of this Agreement.

- If such dispute arises, the parties will endeavor to settle it by informal negotiations A. between themselves. If the parties cannot resolve the issue informally within a reasonable period of time, either of the parties may notify the other in writing stating its position with regard to the dispute and the reasons therefore. A party receiving such a notice of dispute will respond in writing within ten (10) days stating its position. KDHE or KCP&L shall then have an additional ten (10) day period or such longer time as the parties agree to respond. If the parties are still unable to reach an agreement, the matter shall be referred to the KDHE Director of Environment, who shall decide the matter and provide a written statement of his decision which shall be incorporated into the Agreement.
- В. This dispute resolution procedure shall not preclude any party from having direct recourse to court if otherwise available under the Kansas Judicial Review Act, K.S.A. 77-601 et. seq. or other applicable law.

### OTHER CLAIMS AND PARTIES

33. Nothing in this Agreement shall constitute or be construed as a release for any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to this Agreement.

# EFFECTIVE DATE, TERMINATION

- This Agreement shall become effective when signed by the Secretary of the Department of 34. Health and Environment.
- 35. This Agreement will be terminated at such time that it is superseded by a future agreement, regulation, or other enforceable document that contains equivalent or more stringent emission limits. KDHE will provide written notice to KCP&L of said termination. Such notice shall not be unreasonably withheld.

# AUTHORIZATION OF SIGNATORIES TO EXECUTE THE AGREEMENT AND BIND THE PARTIES

36.	The parties hereto have affixed their sig	natures on the dates inserted below to acknowledge
	their agreement to this Agreement. The	e signatories to this Agreement certify that they are
	and legally bind to	the parties they represent to this Agreement.
(In	MM A Sons	Stephen J. Easter
Røder	ick L. Bremby	Stephen T. Easley
Secret	arv	Senior Vice President-Supply

Kansas Department of Health and Environment Kansas City Power and Light Company

November, 19,2007

Date 12/05/2007

#### EPA Rulemakings

CFR: 40 C.F.R. 52.870 (d) (e)

FRM: 76 FR 80754 (12/27/2011)

Effective Date: January 26, 2012

PRM: 76 FR 52604 (08/23/2011)

State Submission: 10/26/2009 11/9/2009

State Effective Date: (d)(3) 12/5/07; (d)(4) 2/29/08;

APDB File: KS-84; EPA-R07-OAR-2011-0675

Description: This revision approves a revision to the SIP addressing the Regional Haze Program

for the first implementation period to EPA-Approved Kansas Nonregulatory Provisions; and adds the Kansas City Power and Light Company Regional Haze Agreement and the Westar Energy, Inc. Regional Haze Agreement to EPA-Approved

Kansas Source Specific Requirements.

#### Difference Between the State and EPA-Approved Regulation

All references to "excluding periods of startup and shutdown" in Paragraph 23 of the Kansas City Power and Light Company Regional Haze agreement are not Federally approved.

The reference to "excluding periods of startup, shutdown and malfunction" in footnote 1 of Appendix A to the Westar Energy, Inc. Regional Haze Agreement is not Federally approved.

All references to "excluding periods of startup, shutdown and malfunction" in Chapter 9.3.1 of the Kansas Regional Haze SIP are not Federally approved.

The sentence "The Agreements between KDHE and the affected BART sources currently exclude emissions associated with startup, shutdowns, and malfunctions (SSM) in the agreed upon emission limits." In Chapter 9.5 of the Kansas regional Haze SIP is not Federally approved.