

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF KENTUCKY  
CENTRAL DIVISION  
LEXINGTON

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UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 5:07-CV-0075-KSF
	)	
KENTUCKY UTILITIES COMPANY,	)	
	)	
Defendant.	)	
	)	

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**CONSENT DECREE**

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WHEREAS, the United States of America (“the United States”), on behalf of the United States Environmental Protection Agency (“EPA”), has filed a complaint against Kentucky Utilities Company (“Kentucky Utilities”) pursuant to Sections 113(b) and 167 of the Clean Air Act (“the Act”), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for violations of the Prevention of Significant Deterioration (“PSD”) provisions of the Act, 42 U.S.C. §§ 7470-92; the New Source Performance Standards (“NSPS”) of the Act, 42 U.S.C. § 7411; Title V of the Act, 42 U.S.C. §§ 7661-7661f; and the State Implementation Plan adopted by the Commonwealth of Kentucky and approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410;

WHEREAS, in its complaint, the United States alleges, *inter alia*, that Kentucky Utilities modified and thereafter operated an electric generating unit at the Brown Power Plant without obtaining the necessary permits or installing and operating the best available control technology to control emissions of nitrogen oxides (“NO<sub>x</sub>”), sulfur dioxide (“SO<sub>2</sub>”), and/or particulate matter (“PM”), as the Act requires; that Kentucky Utilities modified and thereafter operated this Unit -- Brown Unit 3 -- in a manner that resulted in emissions of NO<sub>x</sub>, SO<sub>2</sub>, and/or PM in violation of applicable New Source Performance Standards; and that Kentucky Utilities operated Brown Unit 3 at a heat input rate in excess of 4128 million Btus (“MMBtus”) per hour, in violation of a condition contained in the plant’s operating permit;

WHEREAS, Kentucky Utilities sought and obtained, on March 1, 2005, a Title V operating permit that removed the 4128 MMBtu per hour heat input rate as an enforceable limit at Brown Unit 3 without going through the appropriate permitting procedures, including PSD review;

WHEREAS, the United States' complaint alleges claims upon which relief can be granted against Kentucky Utilities under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 & 7477;

WHEREAS, the United States provided Kentucky Utilities and the Commonwealth of Kentucky with actual notice of alleged violations in accordance with Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), and provided notice of the commencement of suit to the Commonwealth of Kentucky as required by Section 113(b) of the Act, 42 U.S.C. § 7413(b);

WHEREAS, the United States and Kentucky Utilities (collectively, the "Parties") have agreed that settlement of this action is in the best interest of the Parties and in the public interest, and that entry of this Consent Decree without litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, the actions to be taken and the emission reductions to be achieved by Kentucky Utilities under this Consent Decree are for purposes of resolving the claims alleged by the United States, and are undertaken by Kentucky Utilities as part of its efforts to achieve compliance with the Clean Air Act at Brown Unit 3;

WHEREAS, Kentucky Utilities denies the allegations in the complaint and maintains that it has been and remains in compliance with the Act and is not liable for

civil penalties or injunctive relief, and nothing herein shall constitute an admission of liability;

WHEREAS, the Parties have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

### **I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 111, 113 and 167 of the Act, 42 U.S.C. §§ 7411, 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Kentucky Utilities consents to, and shall not challenge, entry of this Consent Decree and this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the Parties to this Consent Decree. Except as provided in Section XXV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

### **II. APPLICABILITY**

2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon and inure to the benefit of the United States and Kentucky Utilities, and their successors and assigns, and upon their officers, employees, and agents, solely in their capacities as such.

3. Kentucky Utilities shall provide a copy of the pertinent provisions of this Consent Decree to all vendors, suppliers, consultants, contractors, and agents, and to any

other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Kentucky Utilities shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, Kentucky Utilities shall not assert as a defense the failure of their officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Kentucky Utilities establishes that such failure resulted from a Force Majeure Event, as defined in Section XIV of this Consent Decree.

### **III. DEFINITIONS**

4. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

“30-Day Rolling Average Emission Rate” shall be expressed in lb/MMBtu and calculated in accordance with the following procedure: (1) sum the total pounds of NO<sub>x</sub> or SO<sub>2</sub> emitted from the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days; (2) sum the total heat input to the Unit in MMBtu during the current Operating Day and the previous twenty-nine (29) Operating Days; and (3) divide the total number of pounds of NO<sub>x</sub> or SO<sub>2</sub> emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new “30-Day Rolling Average Emission Rate” for NO<sub>x</sub> and for SO<sub>2</sub> shall be calculated for each new Operating Day. Except as provided for in this definition and in Paragraphs 76 through 78

(Malfunction), each 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or SO<sub>2</sub> shall include all emissions that occur during all periods within each Operating Day: (i) Kentucky Utilities may exclude emissions that occur during a period of Malfunction from the calculation of the 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or SO<sub>2</sub> if Kentucky Utilities meets the requirements of Paragraphs 76 and 77; (ii) Kentucky Utilities may exclude emissions during start up(s) of Brown Unit 3 following a major outage or during the commissioning of new equipment; provided, however, that this start up exclusion may not occur more frequently than once every five (5) calendar years and the excluded period may not exceed five (5) consecutive Days.

“30-Day Rolling Average SO<sub>2</sub> Removal Efficiency” means the percent reduction in the mass of SO<sub>2</sub> achieved by the Unit’s Flue Gas Desulfurization (“FGD”) system over a 30-Operating Day period and shall be calculated as follows: (1) sum the total pounds of SO<sub>2</sub> emitted from the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the outlet of the FGD system for the Unit; (2) sum the total pounds of SO<sub>2</sub> delivered to the inlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the inlet to the FGD system for that Unit (this shall be calculated by measuring the ratio of the lb/MMBtu SO<sub>2</sub> inlet to the lb/MMBtu SO<sub>2</sub> outlet and multiplying the outlet pounds of SO<sub>2</sub> by that ratio); (3) subtract the outlet SO<sub>2</sub> emissions calculated in step one from the inlet SO<sub>2</sub> emissions calculated in step two; (4) divide the remainder calculated in step three by the inlet SO<sub>2</sub> emissions calculated in step two; and (5) multiply the quotient calculated in step four by 100 to express as a percentage of removal efficiency. A new 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency shall be calculated for each new

Operating Day. Except as provided for in Paragraphs 76 through 78 (Malfunction), each 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub> shall include all emissions that occur during all periods within each Operating Day. Kentucky Utilities may exclude emissions that occur during a period of Malfunction from the calculation of the 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub> if Kentucky Utilities meets the requirements of Paragraphs 76 and 77.

“Brown Power Plant” means Units 1, 2 and 3 of the E.W. Brown Power Station located in Mercer County, Kentucky.

“Brown Unit 3” means Unit 3 of the Brown Power Plant.

“Business Day” shall mean any Day other than Saturday, Sunday, or a federally recognized holiday.

“CEMS” or “Continuous Emission Monitoring System,” means, for obligations involving NO<sub>x</sub> and SO<sub>2</sub> under this Consent Decree, the devices defined in 40 C.F.R. § 72.2, the inlet SO<sub>2</sub> lb/MMBtu monitors, and the computer system for recording, calculating, and storing data and equations required by this Consent Decree.

“Clean Air Act” or “Act” means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.

“Commonwealth” means the Commonwealth of Kentucky.

“Consent Decree” or “Decree” means this Consent Decree.

“Continuously Operate” or “Continuous Operation” means that when an emission control device, such as a SCR, low NO<sub>x</sub> burner, over-fire air, FGD, or ESP, is used at Brown Unit 3, such control device shall be operated at all times the Unit is in operation, except during a Malfunction of such control device, consistent with the technological

limitations, manufacturers' specifications, and good engineering and maintenance practices for such device and the Unit so as to minimize emissions to the extent practicable.

"Day" means calendar day, unless otherwise specified as a Business Day.

"Emission Rate" for a given pollutant means the number of pounds of that pollutant emitted per million British thermal units of heat input (lb/MMBtu), measured in accordance with this Consent Decree.

"EPA" means the United States Environmental Protection Agency.

"ESP" means an electrostatic precipitator, which is a pollution control device for the reduction of particulate matter.

"FGD" means Flue Gas Desulfurization System, which is a pollution control device that employs flue gas desulfurization technology, including an absorber utilizing lime, flyash, or limestone slurry for the reduction of sulfur dioxide emissions.

"Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.

"Kentucky Utilities" means the defendant, Kentucky Utilities Company.

"lb/MMBtu" means one pound of a pollutant per million British thermal units of heat input.

"Malfunction" means malfunction as that term is defined under 40 C.F.R. § 60.2.

"MW" means a megawatt or one million Watts.

"NO<sub>x</sub>" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.

“NO<sub>x</sub> Allowance” means an authorization or credit to emit a specified amount of NO<sub>x</sub> during the Ozone Season that is allocated or issued by Kentucky. This definition shall not apply to any allowance issued by Kentucky related to programs authorizing emissions of NO<sub>x</sub> on an annual basis notwithstanding that such annual allowance includes the right to emit NO<sub>x</sub> during the Ozone Season.

“Operating Day” means any calendar day on which the Unit fires fossil fuel.

“Ownership Interest” means part or all of Kentucky Utilities’ legal or equitable ownership interest in Brown Unit 3.

“Ozone Season” shall mean the period beginning May 1<sup>st</sup> and ending September 30<sup>th</sup> of any calendar year.

“Parties” means the United States and Kentucky Utilities Company. “Party” means one of the named “Parties.”

“PM” means total filterable particulate matter, measured in accordance with the provisions of this Consent Decree.

“Prevention of Significant Deterioration” or “PSD” means the prevention of significant deterioration of air quality program under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, and 40 C.F.R. Part 52.

“Project Dollars” means Kentucky Utilities’ expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b)

constitute Kentucky Utilities' direct payments for such projects, or Kentucky Utilities' external costs for contractors, vendors, and equipment.

“SCR” means selective catalytic reduction system, which is a pollution control device that employs selective catalytic reduction technology for the reduction of NO<sub>x</sub> emissions.

“SO<sub>2</sub>” means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.

“SO<sub>2</sub> Allowance” means “allowance” of SO<sub>2</sub> as defined at 42 U.S.C. § 7651a(3): “an authorization, allocated to an affected Unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide.”

“Surrender” means, with regard to SO<sub>2</sub> and NO<sub>x</sub> Allowances, complying with the procedures set forth herein so that such Allowances can never be used to meet any compliance requirement under the Clean Air Act or a state implementation plan.

“Surplus NO<sub>x</sub> Allowance” means any NO<sub>x</sub> Allowance issued by Kentucky for Brown Unit 3 that Kentucky Utilities does not need to meet the federal and/or state Clean Air Act regulatory requirements for that Unit during the Ozone Season. The number of NO<sub>x</sub> Allowances that are surplus to Kentucky Utilities' Clean Air Act NO<sub>x</sub> Allowance holding requirements shall be equal to the amount by which the NO<sub>x</sub> Allowances allocated to Brown Unit 3 for a particular Ozone Season are greater than the total amount of NO<sub>x</sub> emissions from that Unit for the same Ozone Season.

“Title V Permit” means the permit required of Kentucky Utilities' Brown Power Plant under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.

“Unit” means, for the purposes of this Consent Decree, collectively, at Brown Unit 3, the Brown Unit 3 coal crusher, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment and systems necessary for the production of electricity. An electric utility steam generating station may comprise one or more Units.

“Unit Annual NO<sub>x</sub> Tonnage Limitation” means the limitation, as specified in this Consent Decree, on the total number of tons of NO<sub>x</sub> emitted from Brown Unit 3 during the relevant calendar year (*i.e.*, January 1 through December 31). Compliance with the Unit Annual NO<sub>x</sub> Tonnage Limitation shall be calculated for each new calendar year and such calculation shall include all NO<sub>x</sub> emitted from Brown Unit 3 as reported in the electronic data reports required under Title IV of the Clean Air Act during all periods of operation during the relevant calendar year.

“Unit Annual SO<sub>2</sub> Tonnage Limitation” means the limitation, as specified in this Consent Decree, on the total number of tons of SO<sub>2</sub> emitted from Brown Unit 3 during the relevant calendar year (*i.e.*, January 1 through December 31). Compliance with the Unit Annual SO<sub>2</sub> Tonnage Limitation shall be calculated for each new calendar year and such calculation shall include all SO<sub>2</sub> emitted from Brown Unit 3 as reported in the electronic data reports required under Title IV of the Clean Air Act during all periods of operation during the relevant calendar year.

#### **IV. NO<sub>x</sub> EMISSION REDUCTIONS**

##### **A. NO<sub>x</sub> Emission Controls**

5. By no later than December 31, 2012, Kentucky Utilities shall install an SCR at Brown Unit 3.

6. Beginning no later than December 31, 2012, Kentucky Utilities shall commence Continuous Operation of the SCR so as to achieve and thereafter maintain at Brown Unit 3 a 30-Day Rolling Average Emission Rate for NO<sub>x</sub> of no greater than 0.070 lb/MMBtu, except as provided in Paragraph 7 of this Consent Decree.

7. Beginning no later than December 31, 2012, during any 30-Day period used to calculate a 30-Day Rolling Average Emission Rate for NO<sub>x</sub>, if the dispatch of Brown Unit 3 requires the operation of Brown Unit 3 at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR, despite best efforts by Kentucky Utilities to do so, Kentucky Utilities shall achieve and maintain at Brown Unit 3 a 30-Day Rolling Average Emission Rate for NO<sub>x</sub> of no greater than 0.080 lbs/MMBtu.

8. Beginning thirty (30) days from entry of this Consent Decree, Kentucky Utilities shall Continuously Operate the existing low NO<sub>x</sub> burners and over-fire air at Brown Unit 3.

9. During calendar years 2009 through 2012, Kentucky Utilities shall not exceed a Unit Annual NO<sub>x</sub> Tonnage Limitation at Brown Unit 3 of 4,072 tons of NO<sub>x</sub> per calendar year.

##### **B. General NO<sub>x</sub> Provisions**

10. In determining emission rates for NO<sub>x</sub>, Kentucky Utilities shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75, except that NO<sub>x</sub>

emissions data need not be bias-adjusted. At least one hundred eighty (180) days prior to commencing operation of the SCR, and no later than June 30, 2012, Kentucky Utilities shall submit to EPA for review and approval, a plan for the placement and installation of NO<sub>x</sub> CEMS at Brown Unit 3 for the purpose of measuring NO<sub>x</sub> emissions from only Brown Unit 3, and not Brown Units 1 and 2. Kentucky Utilities shall install and commence continuous operation of such CEMS within one hundred twenty (120) days of receiving EPA's approval of the plan.

**C. Use and Surrender of NO<sub>x</sub> Allowances**

11. Except as may be necessary to comply with Section XIII (Stipulated Penalties), Kentucky Utilities shall not use NO<sub>x</sub> Allowances to comply with any requirement of this Consent Decree, including compliance with any emission limitation, by using, tendering, or otherwise applying NO<sub>x</sub> Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

12. Except as provided in this Consent Decree, Kentucky Utilities shall not sell, trade, or transfer any NO<sub>x</sub> Allowances allocated to Brown Unit 3 that would otherwise be available for sale, trade, or transfer as a result of the actions taken by Kentucky Utilities to comply with the requirements of this Consent Decree. The NO<sub>x</sub> Allowances allocated to Brown Unit 3 may be used by Kentucky Utilities only to meet its own federal and/or state Clean Air Act regulatory requirements for that Unit.

13. For each calendar year beginning with calendar year 2009 and continuing through calendar year 2020, Kentucky Utilities shall surrender to EPA, or transfer to a non-profit third party as provided herein, Surplus NO<sub>x</sub> Allowances, except as provided in Paragraph 17. Kentucky Utilities shall surrender such Surplus NO<sub>x</sub> Allowances within sixty (60) days of the end of each calendar year.

14. For all Surplus NO<sub>x</sub> Allowances required to be surrendered to EPA, Kentucky Utilities or the third-party recipient(s) (as the case may be) shall first submit a NO<sub>x</sub> Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such Surplus NO<sub>x</sub> Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Kentucky Utilities or the third-party recipient(s) shall irrevocably authorize the transfer of these Surplus NO<sub>x</sub> Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the Surplus NO<sub>x</sub> Allowances being surrendered.

15. If any Surplus NO<sub>x</sub> Allowances required to be surrendered under this Consent Decree are transferred to a non-profit third party, Kentucky Utilities shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (a) provide the identity of the non-profit third party recipient(s) of the Surplus NO<sub>x</sub> Allowances and a listing of the serial numbers of the transferred Surplus NO<sub>x</sub> Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the Surplus NO<sub>x</sub> Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any Surplus NO<sub>x</sub> Allowances, Kentucky Utilities shall include a statement that the third-party recipient(s) surrendered the Surplus NO<sub>x</sub> Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 14 within one year after Kentucky Utilities transferred the Surplus NO<sub>x</sub>

Allowances to them. Kentucky Utilities shall not have complied with the Surplus NO<sub>x</sub> Allowance surrender requirements of this Paragraph until all third-party recipient(s) shall have actually surrendered the transferred Surplus NO<sub>x</sub> Allowances to EPA.

16. The requirements in this Consent Decree pertaining to Kentucky Utilities' use and surrender of Ozone Season NO<sub>x</sub> Allowances (Paragraphs 11, 12, 13, 14, 15 and 17) are permanent injunctions that are not subject to any termination provision of this Consent Decree, and shall survive any termination of this Consent Decree as long as Kentucky continues to allocate NO<sub>x</sub> Allowances for the Ozone Season. This Paragraph and the requirements in Paragraphs 11, 12, 13, 14, 15 and 17 shall not apply to any future emissions trading program involving only annual NO<sub>x</sub> limits and/or annual NO<sub>x</sub> allowances.

17. Nothing in this Consent Decree shall preclude Kentucky Utilities from selling or transferring NO<sub>x</sub> Allowances allocated to Brown Unit 3 that become available for sale or trade solely as a result of the achievement and maintenance of a NO<sub>x</sub> emission rate below a 30-Day Rolling Average Emission Rate for NO<sub>x</sub> of 0.070 lb/MMBtu. Kentucky Utilities must timely report the generation of such super-compliant NO<sub>x</sub> Allowances in accordance with Section XI (Periodic Reporting) of this Consent Decree.

18. Nothing in this Consent Decree shall prevent Kentucky Utilities from purchasing or otherwise obtaining NO<sub>x</sub> Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

## **V. SO<sub>2</sub> EMISSION REDUCTIONS**

### **A. SO<sub>2</sub> Emission Controls**

19. Beginning no later than December 31, 2010, Kentucky Utilities shall install a FGD at Brown Unit 3.

20. Beginning no later than December 31, 2010, Kentucky Utilities shall commence Continuous Operation of the FGD so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for SO<sub>2</sub> of no greater than 0.100 lb/MMBtu or a 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency of not lower than 97%.

21. During calendar years 2009 and 2010, Kentucky Utilities shall not exceed a Unit Annual SO<sub>2</sub> Tonnage Limitation at Brown Unit 3 of 31,998 tons of SO<sub>2</sub> per calendar year.

22. Beginning with calendar year 2011, and continuing annually on a calendar year basis thereafter, Kentucky Utilities shall not exceed a Unit Annual SO<sub>2</sub> Tonnage Limitation at Brown Unit 3 of 2,300 tons of SO<sub>2</sub> per calendar year.

### **B. General SO<sub>2</sub> Provisions**

23. In determining Emission Rates and Removal Efficiencies for SO<sub>2</sub>, Kentucky Utilities shall use CEMS in accordance with those reference methods specified in 40 C.F.R. Part 75. Inlet pounds of SO<sub>2</sub> will be calculated as described in the definition of 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency.

### **C. Use and Surrender of SO<sub>2</sub> Allowances**

24. Except as may be necessary to comply with Section XIII (Stipulated Penalties), Kentucky Utilities shall not use SO<sub>2</sub> Allowances to comply with any requirement of this Consent Decree, including compliance with any emission limitation,

by using, tendering, or otherwise applying SO<sub>2</sub> Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

25. By March 1, 2009, or thirty (30) days after entry of the Consent Decree, whichever is later, Kentucky Utilities shall permanently surrender to EPA, or transfer to a non-profit third party, a total of 53,000 SO<sub>2</sub> Allowances of 2008 or earlier vintage.

26. If any SO<sub>2</sub> Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Kentucky Utilities shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third party recipient(s) of the SO<sub>2</sub> Allowances and a listing of the serial numbers of the transferred SO<sub>2</sub> Allowances; and (ii) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO<sub>2</sub> Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO<sub>2</sub> Allowances, Kentucky Utilities shall include a statement that the third party recipient(s) surrendered the SO<sub>2</sub> Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 27 within one year after Kentucky Utilities transferred the SO<sub>2</sub> Allowances to them. Kentucky Utilities shall not have complied with the SO<sub>2</sub> Allowance surrender requirements of this Paragraph until all third party recipient(s) shall have actually surrendered the transferred SO<sub>2</sub> Allowances to EPA.

27. For all SO<sub>2</sub> Allowances surrendered to EPA, Kentucky Utilities or the third party recipient(s) (as the case may be) shall first submit an SO<sub>2</sub> Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division

directing the transfer of such SO<sub>2</sub> Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Kentucky Utilities or the third party recipient(s) shall irrevocably authorize the transfer of these SO<sub>2</sub> Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO<sub>2</sub> Allowances being surrendered.

28. Nothing in this Consent Decree shall prevent Kentucky Utilities from purchasing or otherwise obtaining SO<sub>2</sub> Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

## **VI. PM EMISSION REDUCTIONS**

### **A. PM Controls**

29. Beginning thirty (30) days after entry of this Consent Decree, and continuing thereafter, Kentucky Utilities shall Continuously Operate the ESP at Brown Unit 3 to maximize PM emission reductions at all times when the Unit is in operation, provided that such operation of the ESP is consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the ESP. Except as required during correlation testing under 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Quality Assurance Requirements under Appendix F, Procedure 2, as required by this Consent Decree, Kentucky Utilities shall, at a minimum: (a) fully energize each section of the ESP; (b) operate automatic control systems on the ESP, including the plate-cleaning and discharge electrode cleaning systems, to maximize PM collection efficiency; (c) maintain power levels delivered to the ESP, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering

practices; and (d) inspect the ESP for any openings or leakage in ESP casings, ductwork, and expansion joints, and make repairs to any section of the ESP needing repair during the next scheduled or unscheduled outage.

**B. PM Emission Rate**

30. No later than December 31, 2010, and continuing thereafter, Kentucky Utilities shall Continuously Operate the ESP at Brown Unit 3 to achieve a PM Emission Rate no greater than 0.030 lb/MMBtu. Compliance with the 0.030 lbs/MMBtu emission rate shall be demonstrated by stack tests in accordance with Paragraphs 31-32.

**C. PM Emissions Monitoring**

31. Beginning in calendar year 2011, and continuing in each calendar year thereafter, Kentucky Utilities shall conduct a stack test for PM on the common stack servicing Brown Unit 3 at least one time each calendar year, with each stack test conducted at least six (6) months apart. The stack test requirement imposed by this Paragraph may be satisfied by stack tests conducted by Kentucky Utilities as required by its permits held for Brown Unit 3 for any year that such stack tests are required under the permits.

32. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, 5B, or 17, or an alternative method requested for use by Kentucky Utilities, and approved for use herein by EPA. The alternative method must conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.50Da, or any federally-approved method contained in the Kentucky State Implementation Plan. Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or Malfunction. The sampling time for each run

shall be at least 120 minutes and the volume of each run shall be 1.70 dry standard cubic meters (60 dry standard cubic feet). Kentucky Utilities shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f), and shall report the results of each PM stack test to EPA within forty-five (45) days of completion of each test.

**D. Installation and Operation of PM CEMS**

33. Kentucky Utilities shall install, correlate, operate, and maintain a PM CEMS at the common stack servicing Brown Unit 3, as specified below. The PM CEMS shall be comprised of (a) a continuous particle mass monitor that measures particulate matter concentrations, directly or indirectly, on an hourly average basis and (b) a CO<sub>2</sub> diluent monitor used to convert the concentration to units of lb/MMBtu. Kentucky Utilities shall maintain, in an electronic database, the hourly average emission values produced by the PM CEMS in lb/MMBtu. Kentucky Utilities shall use best efforts to keep the PM CEMS running and producing data whenever Brown Unit 3 is in operation. All periods of monitor malfunction, maintenance or repair shall be noted as such in the electronic database.

34. At least two hundred seventy (270) days prior to commencing operation of PM CEMS as set forth in Paragraph 35, and no later than September 30, 2010, Kentucky Utilities shall submit to EPA pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree: (a) a plan for the installation and certification of a PM CEMS, and (b) a proposed Quality Assurance/Quality Control (“QA/QC”) protocol that Kentucky Utilities shall follow in correlating the PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, Kentucky Utilities shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B,

Performance Specification 11, and Appendix F, Procedure 2. Following approval by EPA of the protocol, Kentucky Utilities shall thereafter operate each PM CEMS in accordance with the approved protocol.

35. Within one hundred eighty (180) calendar days following commencement of operation of the FGD, Kentucky Utilities shall install, correlate, maintain, and operate a PM CEMS on the Unit, in accordance with the PM CEMS installation plan and QA/QC protocol approved by EPA pursuant to the preceding Paragraph. No later than ninety (90) days after Kentucky Utilities begins operation of the PM CEMS, Kentucky Utilities shall conduct performance specification tests of the PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA in accordance with Section XII (Review and Approval of Submittals) and shall report such information to EPA no later than forty-five (45) days after such tests.

**E. PM Reporting**

36. Following the installation of the PM CEMS, Kentucky Utilities shall report to EPA, pursuant to Section XI (Periodic Reporting), the data recorded by the PM CEMS in the common stack for Brown Units 1, 2 and 3, expressed in electronic format in lb/MMBtu on a 6-hour and 24-hour rolling average basis.

37. Although stack tests shall be used for demonstrating compliance with the PM Emission Rate imposed by this Consent Decree, nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law, including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), concerning the use of data for any purpose under the Act.

## **VII. PROHIBITION ON NETTING CREDITS OR OFFSETS**

38. Emission reductions that result from actions to be taken by Kentucky Utilities after entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.

39. The limitation on the generation and use of netting credits or offsets set forth in the previous Paragraph does not apply to emission reductions achieved by Brown Unit 3 that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from Brown Unit 3 are greater than those required under this Consent Decree if they result from Kentucky Utilities' compliance with federally enforceable emission rates or removal efficiencies that are more stringent than those limits imposed on Brown Unit 3 under this Consent Decree and under applicable provisions of the Clean Air Act and the Kentucky State Implementation Plan.

40. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the Commonwealth of Kentucky or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

## **VIII. ENVIRONMENTAL MITIGATION PROJECTS**

41. Kentucky Utilities shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Project and other terms of this Consent Decree.

42. Kentucky Utilities shall submit plans for each of the Projects to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A to this Consent Decree. In implementing the Projects, Kentucky Utilities shall spend no less than \$3,000,000. Kentucky Utilities shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to EPA within thirty (30) days of a request by EPA for such documentation.

43. All plans and reports prepared by Kentucky Utilities pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Kentucky Utilities without charge.

44. Kentucky Utilities shall certify, as part of each plan submitted to EPA for any Project, that Kentucky Utilities is not otherwise required by law to perform the Project described in the plan, that Kentucky Utilities is unaware of any other person who is required by law to perform the Project, and that Kentucky Utilities will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law.

45. Kentucky Utilities shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.

46. If Kentucky Utilities elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Kentucky Utilities, but not including Kentucky Utilities' agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority

for accepting such funding; and (b) identify its legal authority to conduct the Project for which Kentucky Utilities contributes the funds. Regardless of whether Kentucky Utilities elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Kentucky Utilities acknowledges that it will receive credit for the expenditure of such funds only if Kentucky Utilities demonstrates that the funds have been actually spent by either Kentucky Utilities or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.

47. Beginning six (6) months after entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of demonstration or testing), Kentucky Utilities shall provide EPA with semi-annual updates concerning the progress of each Project.

48. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Kentucky Utilities shall submit to EPA a report that documents the date that the Project was completed, Kentucky Utilities' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the total Project Dollars expended by Kentucky Utilities in implementing the Project.

#### **IX. CIVIL PENALTY**

49. Within thirty (30) calendar days after entry of this Consent Decree, Kentucky Utilities shall pay to the United States a civil penalty in the amount of \$1,400,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File No. 2007V00233, DOJ Case No. 90-5-1-1-07915, and the civil

action case name and case number of this action. The costs of such EFT shall be Kentucky Utilities' responsibility. Payment shall be made in accordance with instructions provided to Kentucky Utilities by the Financial Litigation Unit of the U.S. Attorney's Office for the Eastern District of Kentucky. Any funds received after 2:00 p.m. EDT shall be credited on the next Business Day. At the time of payment, Kentucky Utilities shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XVIII (Notices) of this Consent Decree.

50. Failure to timely pay the civil penalty shall subject Kentucky Utilities to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Kentucky Utilities liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

51. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

**X. RESOLUTION OF CERTAIN CIVIL CLAIMS OF THE UNITED STATES**

52. Entry of this Decree shall resolve all civil claims of the United States against Kentucky Utilities that arose from any modifications commenced at Brown Unit 3 prior to the Date of Lodging of this Consent Decree, including but not limited to those modifications alleged in the United States' Complaint in this civil action and in the Notices of Violation issued to Kentucky Utilities on April 25, 2006, and December 5, 2006, under:

- a. Sections 502(a) and 504(a) of Title V of the Clean Air Act, 42 U.S.C §§ 7611(a) and 7611(c), but only to the extent that such claims are based on (i) Kentucky Utilities' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act, and (ii) Kentucky Utilities' operation of Brown Unit 3 at a heat input in excess of the value listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) and its March 1, 2005 Brown Power Plant Title V permit No. V-03-034;
- b. Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, including any claims arising from deletion of enforceable heat input limits listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) from Kentucky Utilities' March 1, 2005 Brown Power Plant Title V permit No. V-03-034;
- c. Section 111 of the Clean Air Act, 42 U.S.C. § 7411, and 40 C.F.R. § 60.14;
- d. 401 KAR 51:017 and all relevant prior versions of these regulations, including any claims arising from deletion of enforceable heat input limits listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) from Kentucky Utilities' March 1, 2005 Brown Power Plant Title V permit No. V-03-034; and

- e. 401 KAR 52.020 and all relevant prior versions of these regulations, but only to the extent that such claims are based on (i) Kentucky Utilities' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act, and (ii) Kentucky Utilities' operation of Brown Unit 3 at a heat input in excess of the value listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) and its March 1, 2005 Brown Power Plant Title V permit No. V-03-034.

#### **XI. PERIODIC REPORTING**

53. Compliance Report. After entry of this Decree, Kentucky Utilities shall submit to EPA a semi-annual report, within sixty (60) days after the end of each half of the calendar year (January through June and July through December). The report shall include the following:

- a. Information, including milestone dates, regarding the design and installation of the FGD and the SCR required under this Consent Decree, including any problems encountered or anticipated, together with implemented or proposed solutions;
- b. Any information indicating that the installation or commencement of operation of a pollution control device might be delayed, including the nature and cause of the delay, and any steps taken by Kentucky Utilities to mitigate such delay;
- c. Beginning with the first report filed after June 30, 2013, information to demonstrate compliance with the 30-Day Rolling

Average Emission Rate for NO<sub>x</sub> during the preceding six-month reporting period;

- d. Beginning with the first report filed after June 30, 2013, information identifying the amount of time, if any, during the preceding six-month reporting period in which the dispatch of Brown Unit 3 requires operation of Brown Unit 3 at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR;
- e. Beginning with the first report filed after June 30, 2011, information to demonstrate compliance with the 30-Day Rolling Average Emission Rate for SO<sub>2</sub> or 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency during the preceding six-month reporting period;
- f. Beginning December 31, 2011, for each semi-annual report submitted after the end of a calendar year, information to demonstrate compliance with the Unit Annual SO<sub>2</sub> Tonnage Limitation in Paragraph 22 during the preceding calendar year;
- g. For the first semi-annual report to be submitted under this Consent Decree, and continuing annually thereafter, demonstration of the surrender of all SO<sub>2</sub> and NO<sub>x</sub> allowances required to be surrendered under this Consent Decree, as well as any supercompliant NO<sub>x</sub> allowances;

- h. All data recorded by the PM CEMs in the common stack for Brown Units 1, 2 and 3 as required by Paragraph 36, including data, if any, from all periods of monitor malfunction, maintenance, or repair as provided in Paragraph 33; and
- i. All other information necessary to determine compliance with the requirements of this Consent Decree.

54. Deviations Report. In addition to the reports required by the previous Paragraph, if Kentucky Utilities violates or deviates from any provision of this Consent Decree, Kentucky Utilities shall submit to the United States a report on the violation or deviation within ten Business Days after Kentucky Utilities knew or should have known of the event. In the report, Kentucky Utilities shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by Kentucky Utilities to cure the reported violation or deviation or to prevent such violation or deviations in the future. For PM emissions measured by PM CEMS, the requirements of this Paragraph shall be satisfied by compliance with the reporting requirements set forth in Paragraph 36.

55. Each Kentucky Utilities report shall be signed by Kentucky Utilities' Director, Environmental Affairs, or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for

submitting false, inaccurate, or incomplete information to the United States.

56. If any allowances are surrendered to any third party pursuant to Section IV.C (Use and Surrender of NO<sub>x</sub> Allowances) or V.C (Use and Surrender of SO<sub>2</sub> Allowances), the third party's certification shall be signed by a managing officer of the third party, and shall contain the following language:

I certify under penalty of law that \_\_\_\_\_ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

## **XII. REVIEW AND APPROVAL OF SUBMITTALS**

57. Kentucky Utilities shall submit to EPA each submission required to be submitted by Kentucky Utilities for review or approval. EPA may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval. Within sixty (60) days of receiving written comments from EPA, Kentucky Utilities shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to EPA; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XV (Dispute Resolution) of this Consent Decree.

58. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Kentucky Utilities shall implement the approved submittal in accordance with the schedule specified therein.

**XIII. STIPULATED PENALTIES**

59. For any failure by Kentucky Utilities to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIV (Force Majeure) and XV (Dispute Resolution), Kentucky Utilities shall pay, within thirty (30) days after receipt of written demand to Kentucky Utilities by the United States, the following stipulated penalties to the United States:

<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000 per Day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO <sub>x</sub> , where the violation is less than 5% in excess of the limit set forth in this Consent Decree	\$2,500 per Day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO <sub>x</sub> , where the violation is equal to or greater than 5% but less than 10% in excess of the limit set forth in this Consent Decree	\$5,000 per Day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO <sub>x</sub> , where the violation is equal to or greater than 10% in excess of the limit set forth in this Consent Decree	\$10,000 per Day per violation
e. Failure to comply with any applicable 30-Day Rolling Average Removal Efficiency or 30-Day Rolling Average Emission Rate for SO <sub>2</sub> where the violation is less than 5% in excess of the 30-Day Rolling Average Emission Rate for SO <sub>2</sub> or is less than 5% below the 30-Day Rolling Average Removal Efficiency for SO <sub>2</sub> in this Consent Decree	\$2,500 per Day per violation
f. Failure to comply with any applicable 30-	

<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
Day Rolling Average Removal Efficiency or 30-Day Rolling Average Emission Rate for SO <sub>2</sub> where the violation is more than 5% but less than 10% in excess of the 30-Day Rolling Average Emission Rate for SO <sub>2</sub> or is more than 5% but less than 10% below the 30-Day Rolling Average Removal Efficiency for SO <sub>2</sub> in this Consent Decree	\$5,000 per Day per violation
g. Failure to comply with any applicable 30-Day Rolling Average Removal Efficiency or 30-Day Rolling Average Emission Rate for SO <sub>2</sub> where the violation is greater than 10% in excess of the 30-Day Rolling Average Emission Rate for SO <sub>2</sub> or is greater than 10% below the 30-Day Rolling Average Removal Efficiency for SO <sub>2</sub> in this Consent Decree	\$10,000 per Day per violation
h. Failure to comply with the Unit-Specific Annual Tonnage Limitation for SO <sub>2</sub> for Brown Unit 3	The surrender of SO <sub>2</sub> Allowances in an amount equal to four times the number of tons by which the limitation was exceeded
i. Failure to install, commence operation, or continue operation of the NO <sub>x</sub> or SO <sub>2</sub> pollution control devices on any Unit as required under this Consent Decree	\$10,000 per Day per violation during the first 30 days; \$32,500 per Day per violation thereafter
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per Day per violation
k. Failure to apply for any permit required by Section XVI (Permits)	\$1,000 per Day per violation
l. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per Day per violation during the first ten days, \$1,000 per Day per violation thereafter
m. Failure to surrender NO <sub>x</sub> Allowances as required by this Consent Decree—	(a) \$32,500 per Day plus (b) \$1,000 per NO <sub>x</sub> Allowance not

<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
	surrendered, and \$5,000 per NO <sub>x</sub> Allowance for each NO <sub>x</sub> Allowance used, sold, or transferred in violation of this Consent Decree
n. Failure to surrender SO <sub>2</sub> Allowances as required by this Consent Decree	(a) \$32,500 per Day plus (b) \$1,000 per SO <sub>2</sub> Allowance not surrendered, and \$5,000 per SO <sub>2</sub> Allowance for each SO <sub>2</sub> Allowance used, sold, or transferred in violation of this Consent Decree
o. Failure to demonstrate the third-party surrender of a NO <sub>x</sub> Allowance or SO <sub>2</sub> Allowance in accordance with this Consent Decree	\$2,500 per Day per violation
p. Failure to undertake and complete an Environmental Mitigation Project in accordance with this Consent Decree	\$1,000 per Day per violation during the first 30 days, \$5,000 per Day per violation thereafter
q. Any other violation of this Consent Decree	\$1,000 per Day per violation

60. Violation of any limit based on a 30-Day Rolling Average constitutes thirty (30) days of violation, but where such a violation of the same pollutant recurs at Brown Unit 3 within a period of less than thirty (30) days, Kentucky Utilities shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.

61. All stipulated penalties shall begin to accrue on the Day after the performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation

ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

62. Kentucky Utilities shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to Kentucky Utilities from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Kentucky Utilities elects, within twenty days of receipt of written demand for stipulated penalties from the United States, to dispute the accrual of stipulated penalties in accordance with the provisions in Section XV (Dispute Resolution) of this Consent Decree.

63. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 61 and this Paragraph 63 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement, or by a decision of United States pursuant to Section XV (Dispute Resolution) of this Consent Decree that is not appealed to this Court, Kentucky Utilities shall pay all accrued stipulated penalties agreed or determined to be owing, together with accrued interest, within thirty (30) days of the effective date of the agreement or of the receipt of the United States' decision;
- b. If the dispute is appealed to this Court, and the United States prevails in whole or in part, Kentucky Utilities shall pay all

accrued stipulated penalties determined by this Court to be owing, together with interest accrued on such penalties determined by this Court to be owing, within sixty (60) days of receipt of the Court's decision or order, except as provided in Subparagraph 63.c, below;

- c. If the Court's decision is appealed by any Party, Kentucky Utilities shall pay all accrued stipulated penalties determined by the appellate court to be owing, together with interest accrued on such stipulated penalties determined to be owing, within fifteen (15) days of receipt of the final appellate court decision.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the United States and Kentucky Utilities, or determined by the United States through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 59.

64. All monetary stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree. All allowance surrender penalties shall comply with the allowance surrender procedures set forth in this Consent Decree.

65. Should Kentucky Utilities fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.

66. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of Kentucky Utilities' failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent

Decree provides for payment of a stipulated penalty, Kentucky Utilities shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

#### **XIV. FORCE MAJEURE**

67. For purposes of this Consent Decree, a “Force Majeure Event” shall mean an event that has been or will be caused by circumstances beyond the control of Kentucky Utilities, its contractors, or any entity controlled by Kentucky Utilities, that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree, despite Kentucky Utilities’ best efforts to fulfill the obligation. “Best efforts to fulfill the obligation” include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.

68. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree as to which Kentucky Utilities intends to assert a claim of Force Majeure, Kentucky Utilities shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) Business Days following the date Kentucky Utilities first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Kentucky Utilities shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Kentucky Utilities to prevent or minimize the delay or violation, the schedule by which Kentucky Utilities proposes to implement

those measures, and Kentucky Utilities' rationale for attributing a delay or violation to a Force Majeure Event. Kentucky Utilities shall adopt all reasonable measures to avoid or minimize such delays or violations. Kentucky Utilities shall be deemed to know of any circumstance which Kentucky Utilities, its contractors, or any entity controlled by Kentucky Utilities knew or should have known.

69. Failure to Give Notice. If Kentucky Utilities fails to comply with the notice requirements of this Section, the United States may void Kentucky Utilities' claim for Force Majeure as to the specific event for which Kentucky Utilities has failed to comply with such notice requirement.

70. United States' Response. EPA shall notify Kentucky Utilities in writing regarding Kentucky Utilities' claim of Force Majeure within twenty Business Days of receipt of the notice provided under Paragraph 68. If the United States agrees that a delay in performance has been or will be caused by a Force Majeure Event, then the United States and Kentucky Utilities shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, the Parties shall make an appropriate modification of the deadline(s) pursuant to Section XXII (Modification) of this Consent Decree.

71. Disagreement. If the United States does not accept Kentucky Utilities' claim of Force Majeure, or if EPA and Kentucky Utilities cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XV (Dispute Resolution) of this Consent Decree.

72. Burden of Proof. In any dispute regarding Force Majeure, Kentucky Utilities shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Kentucky Utilities shall also bear the burden of proving that Kentucky Utilities gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

73. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of Kentucky Utilities' obligations under this Consent Decree shall not constitute a Force Majeure Event.

74. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Kentucky Utilities' response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that requires Kentucky Utilities to supply electricity in response to a state-wide or regional emergency. Depending upon the circumstances and Kentucky Utilities' response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Kentucky Utilities and

Kentucky Utilities has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

75. As part of the resolution of any matter submitted to this Court under Section XV (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the United States and Kentucky Utilities by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States and the States or approved by the Court. Kentucky Utilities shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Kentucky Utilities shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

76. Malfunction Events. If Kentucky Utilities proposes to exclude emissions during a period of Malfunction from the calculation of any 30-Day Rolling Average Emission Rate or 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency, Kentucky Utilities shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) days following the date the Malfunction occurs. In this notice, Kentucky Utilities shall describe the anticipated length of time that the Malfunction may persist, the cause or causes of the Malfunction, all measures taken or to be taken by Kentucky Utilities to minimize the duration of the Malfunction, and the schedule by which

Kentucky Utilities proposes to implement those measures. Kentucky Utilities shall adopt all reasonable measures to minimize the duration of such Malfunctions, and to prevent the recurrence of such Malfunctions in the future.

77. Kentucky Utilities may exclude NO<sub>x</sub> and SO<sub>2</sub> emissions data during a period of Malfunction, after approval from EPA pursuant to Paragraph 78, from calculation of the 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or SO<sub>2</sub> or the 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub>, only if, in the notice required pursuant to Paragraph 76, Kentucky Utilities demonstrates that:

a. The Malfunction did not result from the failure of Kentucky Utilities to properly operate and maintain the equipment that experienced the Malfunction;

b. Kentucky Utilities took all reasonable steps to correct, as expeditiously as practicable, the condition causing the emissions to exceed the 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or SO<sub>2</sub> or 30-Day Rolling Average Removal Efficiency for SO<sub>2</sub>;

c. Kentucky Utilities took all reasonable steps to minimize emissions and their effect on air quality resulting from the Malfunction;

d. The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

e. The Malfunction was not caused entirely or in part by poor maintenance, careless operation, or any other preventable upset conditions or equipment breakdown.

78. EPA shall notify Kentucky Utilities of its determination of whether emissions during the period of Malfunction may be excluded from calculation of the 30-Day Rolling Average Emission Rate for NO<sub>x</sub> or SO<sub>2</sub> or the 30-Day Rolling Average

Removal Efficiency for SO<sub>2</sub> as soon as practicable, but no later than sixty (60) days after the date that all information required by Paragraphs 76 and 77 has been submitted.

79. A Malfunction does not constitute a Force Majeure Event unless the Malfunction also meets the definition of a Force Majeure Event, as provided in this Section. Conversely, a period of Malfunction may be excluded by Kentucky Utilities from the calculations of emission rates and removal efficiencies, as allowed under this Paragraph, regardless of whether the Malfunction constitutes a Force Majeure Event.

## **XV. DISPUTE RESOLUTION**

80. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.

81. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than twenty (20) Business Days following receipt of such notice.

82. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) Days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing

Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution (“ADR”) forum if the Parties agree that the ADR activities can be completed within the thirty (30) Day informal negotiations period (or such longer period as the Parties may agree to in writing).

83. If the disputing Parties are unable to reach agreement during the informal negotiation period, the United States shall provide Kentucky Utilities with a written summary of its position regarding the dispute. The written position provided by the United States shall be considered binding unless, within forty-five (45) Days thereafter, Kentucky Utilities seeks judicial resolution of the dispute by filing a petition with the Court. The United States may respond to the petition within forty-five (45) Days of filing.

84. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the party’s basis for seeking such a scheduling modification.

85. The Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties’ inability to reach agreement.

86. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or the Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Kentucky Utilities shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that

Kentucky Utilities not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

87. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

#### **XVI. PERMITS**

88. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Kentucky Utilities to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, Kentucky Utilities shall make such application in a timely manner. Kentucky Utilities shall provide Notice to the United States under Section XVIII (Notices), that Kentucky Utilities has submitted an application for Brown Unit 3 for any permit described in this Paragraph.

89. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Kentucky Utilities to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of Kentucky Utilities that would give rise to claims resolved by Section X, Paragraph 52 (Resolution of Certain Civil Claims of the United States) of this Consent Decree.

90. When permits are required as described in this Section, Kentucky Utilities shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including

requests for additional information by the permitting authorities. Any failure by Kentucky Utilities to submit a timely permit application for Brown Unit 3 shall bar any use by Kentucky Utilities of Section XIV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

91. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

92. Within one hundred eighty (180) days after entry of this Consent Decree, or at the time that Kentucky Utilities submits its Brown Plant Title V permit application to renew the existing Title V permit that will expire on March 1, 2010, whichever is later, Kentucky Utilities shall apply to permanently include a federally-enforceable numerical hourly heat input rate limitation for Brown Unit 3 of no greater than 5300 MMBtu/hr in the Brown Plant Title V permit, such that the hourly heat input rate limitation becomes and remains an “applicable requirement” as that term is defined in 40 C.F.R. § 70.2. Kentucky Utilities shall state in its application that it shall measure compliance with the heat input limitation by calculating hourly heat input rates using hourly mass coal burned data and weekly composite fuel sampling analysis data collected for Brown Unit 3. EPA will use best efforts to expeditiously review such application submitted by Kentucky Utilities and will not object to amendment or renewal of Kentucky Utilities’ Title V

permit based on that application to include, in accordance with this Paragraph, that heat input rate as the federally enforceable heat input limit for Brown Unit 3.

93. Within one-hundred eighty (180) days after entry of this Consent Decree, or at the time that Kentucky Utilities submits its Brown Plant Title V permit application to renew the existing Title V permit that will expire on March 1, 2010, whichever is later, Kentucky Utilities shall amend any applicable Title V permit application, or apply for amendments of its Title V permit, to include a schedule for all unit-specific and plant-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates, removal efficiencies, the Unit Annual Tonnage Limitations for SO<sub>2</sub> and NO<sub>x</sub>, and the requirements pertaining to the use and surrender of NO<sub>x</sub> Allowances.

94. Within one (1) year from the commencement of operation of the final pollution control device to be installed on the Unit under this Consent Decree, Kentucky Utilities shall apply to permanently include the requirements and limitations enumerated in this Consent Decree into a federally-enforceable permit, such that the requirements and limitations become and remain “applicable requirements” as that term is defined in 40 C.F.R. § 70.2. The permit shall require compliance with the following: (a) any applicable 30-Day Rolling Average Emission Rate; (b) any applicable 30-Day Rolling Average SO<sub>2</sub> Removal Efficiency; (c) the Unit Annual SO<sub>2</sub> Tonnage Limitation set forth in Paragraph 22 of this Consent Decree; and (d) the NO<sub>x</sub> Allowance restrictions set forth in this Consent Decree.

95. Kentucky Utilities shall provide EPA with a copy of each application to amend its Title V permit for Brown Unit 3, as well as a copy of any permit proposed as a

result of such application, to allow for timely participation in any public comment opportunity.

96. If Kentucky Utilities sells or transfers to an entity unrelated to Kentucky Utilities (“Third Party Purchaser”) part or all of its Ownership Interest in the Brown Plant, Kentucky Utilities shall comply with the requirements of Section XIX (Sales or Transfers of Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, Kentucky Utilities remains the holder of the Title V permit for such facility.

#### **XVII. INFORMATION COLLECTION AND RETENTION**

97. Any authorized representative of the United States, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of the Brown Power Plant at any reasonable time for the purpose of:

- a. monitoring the progress of activities required under this Consent Decree;
- b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtaining samples and, upon request, splits of any samples taken by Kentucky Utilities or its representatives, contractors, or consultants; and
- d. assessing Kentucky Utilities’ compliance with this Consent Decree.

98. Kentucky Utilities shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and

documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to Kentucky Utilities' performance of its obligations under this Consent Decree until December 31, 2017. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

99. All information and documents submitted by Kentucky Utilities pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) Kentucky Utilities claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

100. Nothing in this Consent Decree shall limit the authority of the EPA to conduct tests and inspections at Kentucky Utilities' facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

### **XVIII. NOTICES**

101. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611, Ben Franklin Station  
Washington, D.C. 20044-7611

DJ# 90-5-2-1-06837

and

Director, Air Enforcement Division  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
Ariel Rios Building [2242A]  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

and

Director  
Air, Pesticides and Toxics Management Division  
U.S. EPA- Region 4  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303-8960

As to Kentucky Utilities:

General Counsel  
E.ON U.S. LLC  
220 West Main Street  
Louisville, KY 40202

William Bumpers  
Baker Botts LLP  
The Warner  
1299 Pennsylvania Avenue, N.W.  
Washington, DC 20004

102. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service, or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions (a) sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.

103. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

**XIX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS**

104. If Kentucky Utilities proposes to sell or transfer an Ownership Interest to a Third Party Purchaser, Kentucky Utilities shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the United States pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) Days before such proposed sale or transfer.

105. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and the United States have executed, and the Court has approved, a modification pursuant to Section XXII (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree, jointly and severally liable with Kentucky Utilities for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interest.

106. This Consent Decree shall not be construed to impede the transfer of any Ownership Interest between Kentucky Utilities and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation – as between Kentucky Utilities and any Third Party Purchaser of Ownership Interests – of the burdens of compliance with this Decree, provided that both Kentucky Utilities and such Third Party Purchaser shall remain jointly and severally liable to the United States for the obligations of the Decree applicable to the transferred or purchased Ownership Interest.

107. If the United States agrees, then the United States, Kentucky Utilities, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 105, may execute a modification that relieves Kentucky Utilities of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interest. Notwithstanding the foregoing, however, Kentucky Utilities may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interest, including the obligations set forth in Sections VIII (Environmental Mitigation Projects) and IX (Civil Penalty). Kentucky Utilities may propose and the United States may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interest, to the extent such obligations may be adequately separated in an enforceable manner.

**XX. EFFECTIVE DATE**

108. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

**XXI. RETENTION OF JURISDICTION**

109. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

**XXII. MODIFICATION**

110. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the United States and Kentucky Utilities. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

### **XXIII. GENERAL PROVISIONS**

111. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve Kentucky Utilities from any obligation to comply with other state and federal requirements under the Clean Air Act, including Kentucky Utilities' obligation to satisfy any state modeling requirements set forth in the Kentucky State Implementation Plan.

112. This Consent Decree does not apply to any claims of criminal liability.

113. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Kentucky Utilities shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section X (Resolution of Certain Civil Claims of the United States).

114. Nothing in this Consent Decree shall relieve Kentucky Utilities of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section X (Resolution of Certain Civil Claims of the United

States), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

115. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

116. Each limit and/or other requirement established by or under this Decree is a separate, independent requirement.

117. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Kentucky Utilities shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Kentucky Utilities shall report data to the number of significant digits in which the standard or limit is expressed.

118. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.

119. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

120. Each Party to this action shall bear its own costs and attorneys' fees.

#### **XXIV. SIGNATORIES AND SERVICE**

121. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.

122. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

123. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### **XXV. PUBLIC COMMENT**

124. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the

Consent Decree is inappropriate, improper or inadequate. Kentucky Utilities shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Kentucky Utilities, in writing, that the United States no longer supports entry of the Consent Decree.

**XXVI. CONDITIONAL TERMINATION UNDER DECREE**

125. Termination as to Completed Tasks. As soon as Kentucky Utilities completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Kentucky Utilities may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.

126. Conditional Termination of Enforcement Through the Consent Decree.  
After Kentucky Utilities:

a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree for at least two (2) years; and

b. has obtained a final Title V permit (i) as required by the terms of this Consent Decree; (ii) that covers Brown Unit 3; and (iii) that include as applicable requirements all of the requirements specified in Paragraphs 92 and 94 of this Consent Decree;

then Kentucky Utilities may so certify these facts to the United States and this Court. If the United States does not object in writing with specific reasons within forty-five (45) Days of receipt of Kentucky Utilities' certification, then, for any Consent Decree violations that occur after the filing of notice, any enforcement action taken by the United States to resolve those violations shall seek to enforce the requirements contained in the

Title V permit through the applicable Title V permit and/or other enforcement authority and not through this Consent Decree.

127. Resort to Enforcement under this Consent Decree. Notwithstanding the preceding Paragraph, if enforcement of a provision in this Decree cannot be pursued by the United States under the applicable Title V permit, or if a Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced by the United States under the terms of this Decree at any time.

**XXVII. FINAL JUDGMENT**

128. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the United States and Kentucky Utilities.

SO ORDERED, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2009.

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THE HONORABLE KARL S. FORESTER  
UNITED STATES DISTRICT JUDGE

Signature Page for Consent Decree in:

*United States of America*

v.

*Kentucky Utilities Company*, No. 5:07-CV-0075-KSF (E.D. Ky.)

**FOR THE UNITED STATES OF  
AMERICA:**

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JOHN C. CRUDEN

Deputy Assistant Attorney General  
Environment and Natural Resources  
Division  
United States Department of Justice

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W. BENJAMIN FISHEROW

Deputy Section Chief  
ANDREW C. HANSON  
Trial Attorney  
Environmental Enforcement Section  
Environment and Natural Resources  
Division  
United States Department of Justice

Signature Page for Consent Decree in:

*United States of America*

v.

*Kentucky Utilities Company*, No. 5:07-CV-0075-KSF (E.D. Ky.)

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LEE GENTRY  
Assistant United States Attorney  
Eastern District of Kentucky  
United States Department of Justice

Signature Page for Consent Decree in:

*United States of America*

v.

*Kentucky Utilities Company*, No. 5:07-CV-0075-KSF (E.D. Ky.)

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CATHERINE R. McCABE

Acting Assistant Administrator

Office of Enforcement and Compliance Assurance

United States Environmental Protection Agency

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MATTHEW M. MORRISON

Acting Director, Air Enforcement Division

Office of Enforcement and Compliance Assurance

United States Environmental Protection Agency

Signature Page for Consent Decree in:

*United States of America*

v.

*Kentucky Utilities Company*, No. 5:07-CV-0075-KSF (E.D. Ky.)

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MARY WILKES, Regional Counsel  
U.S. Environmental Protection Agency  
Region 4  
61 Forsyth St., S.W.  
Atlanta, GA 30303

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JENNIFER LEWIS, Associate Regional Counsel  
U.S. Environmental Protection Agency  
Region 4  
61 Forsyth Street, S.W.  
Atlanta, GA 30303

Signature Page for Consent Decree in:

*United States of America*

v.

*Kentucky Utilities Company, No. 5:07-CV-0075-KSF*

FOR DEFENDANT  
KENTUCKY UTILITIES COMPANY:

By: \_\_\_\_\_

Name: Ralph Bowling

Title: Vice President, Power Production  
E.ON U.S. LLC

## APPENDIX

In compliance with, and in addition to, the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Kentucky Utilities shall comply with the requirements of this Appendix to ensure that the benefits of the \$3 million in Project Dollars are achieved.

### I. Overall Environmental Mitigation Projects Schedule and Budget

A. Within one hundred twenty (120) days from entry of this Consent Decree, as further described below, Kentucky Utilities shall submit plans to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree for spending the \$3 million in Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA shall determine, prior to approval, that all Environmental Mitigation Projects ("Projects") are consistent with federal law.

B. Kentucky Utilities may, at its election, consolidate the plans required by this Appendix into a single plan.

C. Consistent with Paragraph 47 of the Consent Decree, beginning six months from entry of this Consent Decree, and continuing semi-annually thereafter until completion of each Project (including any applicable periods of demonstration or testing), Kentucky Utilities shall provide EPA with written reports detailing the progress of each Project, including an accounting of Project Dollars spent to date.

D. Consistent with Paragraph 48 of the Consent Decree, within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Kentucky Utilities shall submit to the United States a report that documents the date that the Project was completed, Kentucky Utilities' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Kentucky Utilities in implementing the Project.

E. Upon EPA's approval of the plans required by this Appendix, Kentucky Utilities shall complete the Projects according to the approved plans. Nothing in the Consent Decree or this Appendix shall be interpreted to prohibit Kentucky Utilities from completing the Projects before the deadlines specified in the schedule of an approved plan.

F. If Kentucky Utilities is unable to expend all of the Project Dollars as allocated below in accordance with the schedule contained in this Appendix and with this Consent Decree, or if a third party does not expend all the Project Dollars as allocated to it in accordance with this Appendix and with this Consent Decree and the schedules contained therein, Kentucky Utilities shall provide notice to EPA and the United States Department of Justice pursuant to Section XVIII (Notices) that not all of those funds were expended in accordance with this Appendix and this Consent Decree. In such notice, Kentucky Utilities shall propose new environmental mitigation projects on which the remaining Project Dollars will be expended with a proposed

schedule of when such projects shall be implemented. Upon review and approval by EPA pursuant to Section XII (Review and Approval of Submittals), Kentucky Utilities shall implement those environmental mitigation projects in accordance with the schedule as approved by EPA and Paragraph 58 of this Consent Decree.

## II. Carbon Dioxide ("CO<sub>2</sub>") Sequestration Project

A. By no later than December 31, 2009, Kentucky Utilities shall make funding contributions in the total amount of \$1.8 million to the Western Kentucky Carbon Storage Foundation, Inc. ("Foundation"), a 501(c)(3) tax-exempt organization, to be used for the purpose of supporting research by the University of Kentucky's Kentucky Geological Survey ("KGS"), through the Kentucky Consortium for Carbon Storage ("KYCCS"), to determine the feasibility of permanent geological sequestration of CO<sub>2</sub> in western Kentucky, as described in more detail in Section II.B. of this Appendix, below (the "CO<sub>2</sub> Sequestration Project").

B. The funds contributed to the Foundation by Kentucky Utilities shall be used for the performance of the western Kentucky deep saline carbon storage project, one of four subprojects being conducted by KYCCS. The western Kentucky project includes all activities necessary to complete the drilling of a deep test well in western Kentucky, injection testing to evaluate CO<sub>2</sub> sequestration capability, and analysis of resulting data.

C. The \$1.8 million that Kentucky Utilities contributes to the Foundation shall be used only for the following activities, as they are described in Exhibit 1 to the June 11, 2008 Memorandum of Agreement between KGS and the Foundation: Phase 2, Pre-Selection Site Screening; Phase 3, Detailed Site Characterization and Final Approval; Phase 4, Well Permitting, Design, Construction and Evaluation; Phase 5, Injection Testing, Well Closure and Monitoring; and Phase 6, Reporting and Closure. As part of its report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall provide a description of the activities for which the Foundation expended money during the performance period for the Project.

D. In addition to the information required to be included in the report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall also provide to EPA the results of the injection tests, including any final written reports regarding the results prepared by KYCCS, either as part of the report submitted pursuant to Section I.D. or within thirty (30) days after such information is made available to the Foundation or Kentucky Utilities, whichever is earlier.

## III. Clean Diesel School Bus Retrofit Project

A. Within one hundred twenty (120) days from entry of this Consent Decree, Kentucky Utilities shall submit to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree a plan to retrofit in-service public school bus diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors and fund the operation and maintenance of the retrofit equipment for the time period described below (the "Clean Diesel School Bus Retrofit Project"). This Project shall include, where necessary, techniques and infrastructure needed to support such retrofits. Kentucky Utilities shall spend no less than \$1,000,000 in

Project Dollars in performing this Clean Diesel School Bus Retrofit Project. Kentucky Utilities shall complete the installation of the retrofit equipment no later than December 31, 2010, and ensure that the recipients operate and maintain the retrofit equipment from the date of installation through December 31, 2015, by providing funding for operation and maintenance as described in Section III.B.7, below.

B. The plan shall also satisfy the following criteria:

1. Involve public school bus fleets located in the Commonwealth of Kentucky.
2. Provide for the retrofit of public school bus diesel engines with EPA or California Air Resources Board ("CARB") verified emissions control technologies designed to achieve the greatest measurable mass reductions of particulates and/or ozone precursors for the fleet of school buses in the public school district(s) that participate(s) in this Project. Depending upon the particular EPA or CARB verified emissions control technology selected, the retrofit school bus diesel engines must achieve emission reductions of particulates and/or ozone precursors by 30%-90%, as measured from the pre-retrofit emissions for the particular diesel school bus.
3. Describe the process Kentucky Utilities will use to determine the most appropriate emissions control technology for each particular school bus diesel engine that will achieve the greatest mass reduction of particulates and/or ozone precursors. In making this determination, Kentucky Utilities must take into account the particular operating criteria required for the EPA or CARB verified emissions control technology to achieve the verified emissions reductions.
4. Provide for the retrofit of school bus diesel engines with either: (a) diesel particulate filters; (b) diesel oxidation catalysts and closed crankcase ventilation systems; or (c) another emission reduction technology or methodology approved by EPA.
5. Describe the process Kentucky Utilities will use to notify public school districts within the geographic area specified in Section III.B.1 that their fleet of school buses may be eligible to participate in the Clean Diesel School Bus Retrofit Project and to solicit their interest in participating in the Project.
6. Describe the process and criteria Kentucky Utilities will use to select the particular public school districts to participate in this Project, consistent with the requirements of this Section.
7. For each of the recipient public school districts, describe the amount of Project Dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology, (b) installation of the verified emissions control technology (including data logging), (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning), and (d) the incremental costs for repair and maintenance of the retrofit equipment from the date of installation through December 31,

2015, including the costs associated with the proper disposal of the waste generated from cleaning the verified emissions control technology. This Project shall not include costs for normal repair or operation of the retrofit school bus.

8. Include a mechanism to ensure that recipients of the retrofit equipment will bind themselves to follow the operating criteria required for the verified emissions control technology to achieve the verified emissions reductions and properly maintain the retrofit equipment installed in connection with the Project for the period beginning on the date the installation is complete through December 31, 2015.

9. Describe the process Kentucky Utilities will use for determining which school buses in a particular public school fleet will be retrofit with the verified emissions control technology, consistent with the criteria specified in Section III.B.2.

10. Ensure that recipient public school district(s), or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of school bus diesel engines.

11. For any third party with whom Kentucky Utilities might contract to carry out this Project, establish minimum standards that include prior experience in arranging retrofits, and a record of prior ability to interest and organize fleets, school districts, and community groups to join a clean diesel program.

12. Ensure that the recipient public school district(s) comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology and follow CARB's guidance for the proper disposal of such waste.

13. Include a schedule and budget for completing each portion of the Project, including funding for operation and maintenance of the retrofit equipment through December 31, 2015.

C. In addition to the information required to be included in the report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall also describe the school districts where it implemented this Project; the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Project; the type, year, and horsepower of each retrofit school bus; an estimate of the number of school children affected by this Project, and the basis for this estimate; and an estimate of the emission reductions for each retrofit school bus (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.

D. Upon EPA's approval of the plan, Kentucky Utilities shall complete the Clean Diesel School Bus Retrofit Project according to the approved plan and schedule.

IV. National Parks Mitigation

A. Within sixty (60) days from entry of this Consent Decree, Kentucky Utilities shall pay to the National Park Service the sum of \$200,000 to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on the Mammoth Cave National Park Class I area in Kentucky.

B. Payment of the amount specified in the preceding paragraph shall be made to the Natural Resource Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to Kentucky Utilities by the National Park Service. Notwithstanding Section IV.A of this Appendix, payment of funds by Kentucky Utilities is not due until ten (10) days after receipt of payment instructions.

C. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, Kentucky Utilities shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision of the Consent Decree.