

**Air Pollution Control Board of Jefferson County**  
**Agreed Board Order**  
**Amendment No. 1**

This amended Board Order is issued by the Air Pollution Control Board of Jefferson County (Board) pursuant to the authority granted in Kentucky Revised Statutes Chapter 77 AIR POLLUTION CONTROL.

**COMPANY:** Louisville Gas and Electric Company (LG&E)  
Mill Creek Generating Station (Station)  
14660 Dixie Highway  
Louisville, Kentucky 40272

**REGULATIONS INVOLVED:** Regulation 1.09 – Prohibition of Air Pollution  
Regulation 1.12 – Control of Nuisances

**POLLUTANT:** Particulate Matter

**BACKGROUND AND DISCUSSION:**

The Board issued an Order on March 21, 2001, requiring LG&E to convert the generating units at the Station to wet stack operation by eliminating reheat and enlarging stack breechings, lining the stacks with high-grade stainless steel alloy, upgrading mist eliminators and wash systems, and eliminating the capability of bypassing scrubbers during scrubber malfunction events. Converting to wet stack operation and eliminating reheat are expected to eliminate temperature fluctuations and decrease flue gas velocities. Eliminating reheat and upgrading mist eliminators are expected to minimize carry-over conditions. These measures are expected to eliminate additional conditions associated with reactive particle emissions and to further enhance air pollution controls at the Station. This Order amends the March 21, 2001, Board Order.

Work has been completed on Unit 2 and Unit 4 at the Station. Some safety concerns were identified during the maintenance outage on Unit 4 in the fall of 2001, however. During that outage, the wet stack conversion project was scheduled concurrent with work for the addition of selective catalytic reduction (SCR) technology. The SCR work is required in order to meet federal deadlines for oxides of nitrogen emission reductions. The LG&E safety review committee determined, after reviewing two accidents that occurred during that outage, that the number of workers involved and the scope of work was too enormous to guarantee the highest levels of safety. Because Unit 3 must undergo the same preparation for the SCR technology, a reduction in the scope of work for its wet stack conversion to be completed in the spring of 2002 is necessary. The remaining work will be completed during the next scheduled outage of the unit during the spring of 2004 instead, so that all safety concerns can be addressed.

To ensure that the benefits identified in the original Board Order are attained until full completion of the conversion project, the Unit 3 stack plume reheater will remain in operation until

the full completion of the wet stack conversion project. By leaving the stack plume reheater in service, reductions in the amount of moisture/carry-over conditions will be achieved.

On February 20, 2002, a public hearing was held before the Board on the proposed amendment to the March 21, 2001, Board Order. Based upon the evidence presented at the hearing, the Board determined that the proposed adjustment to the conversion schedule is reasonable and appropriate.

**NOW THEREFORE BE IT ORDERED THAT**

1. LG&E shall continue to convert all four units of the Mill Creek Generating Station (Station) to wet stack operation as required by the March 21, 2001, Board Order, except that the following completion dates shall apply in lieu of the dates set forth in Paragraph 2 of the March 21, 2001, Order:

<u>Milestone</u>	<u>Completion Date</u>
Unit 2 conversion	Completed
Unit 4 conversion	Completed
Unit 3 conversion (phase 1)	May 31, 2002
Unit 1 conversion	February 28, 2003
Unit 3 conversion (phase 2)	May 31, 2004

2. To address the safety concerns identified from the completed conversions, the Unit 3 conversion will be divided into two phases. In Phase 1, LG&E shall line the stack with a high-grade stainless steel alloy, install a new lined stack bottom, install water collection devices and a drain system in the upper portion of the stack, weld bypass dampers to a closed position, and install new mist eliminators and wash system. In Phase 2, LG&E shall remove the stack plume reheater and install water collection devices and a drain system in the lower portion of the stack. LG&E shall continue to operate the Unit 3 stack plume reheater until its removal in Phase 2 of the Unit 3 conversion.

3. LG&E shall monitor and review the six-minute average opacity values and the flue gas hourly temperature values in the stack to determine if there has been a degradation of the reheater efficiency. If there appears to be a decrease in the reheater efficiency, an inspection of the reheater shall be performed expeditiously to determine the problem.

4. The protection from enforcement actions, notices of violation, civil penalties, and other legal actions extended to LG&E pursuant to Paragraph 5 of the March 21, 2001, Board Order shall terminate upon completion of the Unit 1 conversion or by February 28, 2003, whichever is sooner.

5. This amended Board Order shall not be deemed or construed to be a determination by the District of a violation of any federal, state, or local statute, regulation, or ordinance for any purpose whatsoever. Nothing in this Board Order shall be construed as an admission of any violation by LG&E or a waiver of any defenses available to LG&E. By consenting to the terms of this Board Order, LG&E shall not be denied the benefit of any approved amendment or

modification of applicable law or regulation. LG&E reserves the right to contest, through administrative or judicial action, all determinations of the District made pursuant to this Board Order.

6. LG&E has reviewed this Board Order and consents to all its requirements and terms. Further, LG&E agrees to pay the costs of publishing legal notice of the public hearing.

7. In the event that it becomes necessary for the District to seek a court order to enforce this Board Order, LG&E agrees to pay the filing fees and costs of any such action.

Dated this 20<sup>th</sup> day of February, 2002.

AIR POLLUTION CONTROL BOARD  
OF JEFFERSON COUNTY

LOUISVILLE GAS AND ELECTRIC  
COMPANY

BY: \_\_\_\_\_  
JOSEPH D. VIBBERT  
CHAIRMAN

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SENIOR VICE PRESIDENT  
ENERGY SERVICES

AIR POLLUTION CONTROL DISTRICT  
OF JEFFERSON COUNTY

BY: \_\_\_\_\_  
JESSE GOLDSMITH  
AIR POLLUTION CONTROL OFFICER

APPROVED AS TO FORM AND LEGALITY:  
AIR POLLUTION CONTROL DISTRICT  
OF JEFFERSON COUNTY

BY: \_\_\_\_\_  
GAYLORD B. BALLARD  
ATTORNEY