8.2 AMERENUE'S ENVIRONMENTAL COMPLIANCE STRATEGY

In developing an environmental compliance strategy, a company can vary in its method of compliance, from one extreme to the other, or somewhere in between the extremes. At one extreme, the Company can choose to not install any new control technology and purchase all required allowances. At the other extreme the Company can choose to install new control technology on all uncontrolled units and sell any excess allowances. A more balanced approach lies in between the extremes. In a balanced approach the company may choose to do both: purchase some additional allowances and install some control technology. The compliance strategy should balance the capital and operating and maintenance (O&M) costs of the control technology to the cost of purchasing allowances.

AmerenUE performed an environmental compliance strategy analysis separate from the Integrated Resource Plan (IRP) process. The intent of that analysis was to develop a balanced, least-cost compliance strategy for AmerenUE. That analysis is ongoing; however interim results from it were included in the IRP analysis as an alternative to a total purchase strategy.

Technology was considered for controlling the following pollutants: sulfur dioxide (SO_2), nitrogen oxide (NO_x) and mercury (Hg). AmerenUE's existing coal plants – Labadie, Rush Island, Sioux and Meramec – are the primary locations where control technology would be considered.

Flue Gas Desulfurization (FGD) is the primary SO_2 control technology considered. There are two basic types of FGD equipment, or scrubbers -- dry and wet. Dry scrubbers are typically used for controlling SO_2 at facilities which use a low sulfur, PRB-type fuel. Wet scrubbers are typically used for controlling SO_2 at facilities that use a higher sulfur fuel or a range of fuels.

There are a variety of technologies to control NO_x. The least costly and lowest removal efficiency is the over fired air (OFA) system. A higher removal can be achieved from a selective non-catalytic reduction (SNCR) system but at a higher capital and annual O&M cost. Finally the highest removal efficiency can be achieved from a selective catalytic reduction (SCR) system but at a much higher capital cost although at a somewhat lower annual O&M cost.

The purchase strategy assumed no new installations of any SO_2 and NO_x control technology. It did assume Hg controls would be installed. AmerenUE would be required to meet the lower caps specified in the CAIR regulations for SO_2 and NO_x. Thus, AmerenUE purchased sufficient allowances to offset any excess emissions relative to the lower caps.

The balanced strategy assumed Hg controls would be installed. In addition the balanced strategy included the installation of scrubbers for SO_2 control on the following schedule:

For NO_x control, the balanced strategy assumed an system on by and a on and by

These emission control technology installations would create an environmental compliance strategy which would place AmerenUE in a "near" self-compliant position for SO_2 and NO_x. Any excess emissions relative to the lower emission caps would be purchased. Any surplus allowances would be sold to maintain the same SO_2 and NO_x position for the two strategies.