



MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT
DIVISION OF ENERGY

Appendix A - Examples of CAIR EE/RE projects that could qualify for an award of allowances

The Division of Energy will add additional examples to those listed here as they become available.

Energy Efficiency (EE) Example

LEED-certified Energy Efficient Building

The following example is based on the Lewis and Clark State Office Building (LCSOB), a LEED-certified 120,000 square foot building on which construction was completed in early 2005.

The annual electricity consumption for a conventional 120,000 square foot office building would be nearly 2,500 megawatt hours (MWh). By contrast, the LCSOB uses less than 700 MWh per year, resulting in annual electricity savings of nearly 1,800 MWh. Applying the default value of .0015 pounds of NO_x avoided per kilowatt-hour saved, the LCSOB avoids about 1.35 tons of NO_x per year. (*Source: Rumsey Engineers, Design Development Energy Report, 2001 Rev 1.1*)

The LCSOB is not eligible to receive awards from the CAIR set-aside because it was completed prior to September 30, 2005. However, a new or retrofitted building project that demonstrated this level of energy savings would qualify to receive awards of one allowance per year for a period of seven years.

Note: "LEED" designates the Leadership in Energy and Environmental Design (LEED) Green Building Rating System developed by the U.S. Green Building Council. LEED certification is **not** a requirement for project eligibility under the CAIR set-aside program.

Renewable Generation Example

100 MW Wind Farm

A 100 MW wind farm that generates power year-round and operates at a 30 percent capacity factor would generate about 260 thousand MWh of electricity per year. Applying the default value of .0015 pounds of NO_x avoided per kilowatt-hour generated, this project avoids emissions of about 195 tons of NO_x from conventional power plants per year.

Assuming that the wind farm is owned by a Missouri utility and that the amount of electricity it generates has been properly metered and documented, and that 60 percent of the utility's electricity sales are to Missouri customers, this level of energy savings would qualify to receive awards of 117 allowances per year for a period of seven years (if the wind farm is located in Missouri) or five years (if the wind farm is located outside Missouri.)

Note: The actual number of allowances awarded would be fewer than 117 if the CAIR set-aside is oversubscribed. In case of oversubscription, qualified generation projects would receive awards on a tiered pro rata basis. Additional information on allocation of awards in case of oversubscription is available from the Division of Energy.