



In the largest voluntary program ever undertaken to reduce mercury emissions, Luminant has installed one of the most effective mercury control systems available on each of its coal-fueled power generating units. The knowledge Luminant has gained from a decade of cutting-edge mercury control research benefits the public, the environment and the entire coal power generation industry.

In the Forefront of Mercury Control

- Luminant's Oak Grove and Sandow 5 power plants are the first 100 percent lignite units in the nation to remove mercury using activated carbon sorbent injection technology.
- This technology is now installed on every Luminant coal-fueled unit and has resulted in a reduction of more than 20 percent in mercury emissions across the coal fleet versus 2005 coal-fueled levels.
- Luminant's public-private research collaboration contributed to the commercial readiness of this technology.

Understanding Sorbent Injection

- Activated carbon, a sorbent, is injected into the flue-gas ductwork.
- The mercury contacts the sorbent and attaches to its surface.
- The sorbent is then collected by the plant's existing particle-control device, such as an electrostatic precipitator or fabric filter.
- Injecting a sorbent into the flue gas is one of the most effective ways to control mercury emissions from coal-fueled boilers.

Researching Mercury Controls

- Luminant has partnered with the U.S. Department of Energy, U.S. Environmental Protection Agency, University of Texas at Austin, Electric Power Research Institute and other research institutions on more than 40 projects to evaluate technologies to control mercury.
- That work has paid off with effective commercial technology designed specifically to capture mercury from coal power plants.
- Luminant has also contributed to the commercial readiness of this technology through full-scale demonstrations of two selected technologies at the company's Big Brown and Monticello generating plants.
- In 2007, Luminant began installing activated carbon sorbent injection systems on every coal-fueled generating unit in its fleet as part of the largest voluntary emission reduction program in the power industry.
- The company has also joined with a partner in developing an activated carbon production facility to ensure an adequate supply.
- Luminant continues to test new and innovative mercury controls.



All of Luminant's coal plants are equipped with sorbent technology, including Big Brown and Monticello.

