

FIKE SYSTEMS HELP POWER GENERATING STATION ACHIEVE "PLANT OF THE YEAR" STATUS

In 2003, Jeffrey Energy Center (JEC), the largest coal-fired plant in Kansas, was recognized by the Powder River Basin (PRB) Coal User's Group as its PRB Plant of the year. Industry recognition was achieved through plant safety, plant performance, environmental achievements and overall plant cleanliness. Over the years JEC has undertaken a number of projects and process changes to further improve the plant. Enhancements to the fire detection and suppression systems have been a vital part of the plant's earned recognition as a pacesetter plant.

In late 2004, the Halon 1301 system protecting JEC's Unit 3 Control Areas experienced numerous unwanted false alarms resulting in several costly, time-consuming system discharges. Jon Stoddard, a Westar Fire Protection Loss Representative, conducted an investigation of new fire protection technologies that were available to replace the ozone-depleting Halon system. The recommendation included a system featuring DuPont's FE-25™ extinguishing agent, as well as the advanced technologies of a new detection and control system. **Fike Corporation** was invited to submit a performance specification and budget to replace the existing Halon 1301 systems.

The specification included a new **ECARO-25™** clean agent suppression system (utilizing FE-25) and a **Cheetah™** intelligent control unit, both manufactured by **Fike**. The specification included these components, predominately because the **ECARO-25** system requires 20 % less agent, has a much lower per-pound agent cost, and more readily retains the necessary agent concentration levels than other clean agents. In addition, FE-25 is safe for people, the environment and sensitive computer equipment and electronic controls, thus satisfying the environmental requirements of the specification.

Remote displays were specified for network connection to the new **Cheetah™** control unit, which is capable of monitoring and controlling multiple zones and up to 508 addressable devices, for future expansion. It was advised that **VESDA LaserPLUS®** air sampling detectors with display units also be connected to the **Cheetah** control unit, to handle coal dust and other contaminants in a high-air-movement environment. Each of the systems was designed by a NICET Certified Fire Protection Engineering Technician, and upon receiving approvals, was installed in August of 2005.

Jon Stoddard was so completely satisfied with the installation that Westar Energy is planning to use Fike fire protection systems *exclusively* for all future projects at JEC. The budget for installing similar systems on Unit 1, has already been approved.

Critical Project Success Factors:

- Westar Energy, Inc. thoroughly researched the most efficient, effective and environmentally-friendly solution to protecting the JEC control areas.
- **Fike** carefully evaluated all aspects of the protected areas, as well as the characteristics of any potential hazards. This assured the installation of the most efficient and cost-effective systems, including **Fike's** state-of-the-art **ECARO-25** system, the intelligent **Cheetah** fire detection system and the **Vesda air sampling** units.
- The successful partnership of **Fike** and **Westar Energy** has resulted in a system that will propel Jeffery Energy Center towards continued success as a premier power producer and leader in safety and environmental challenges.