

## **Bailey DCS Migration Projects (EPC)**

### *Frito Lay, Kirkwood*

Bob Schuerch started up this facility when it was first built. Throughout the years, TCSI supplied Frito Lay with the technical support to maintain the Bailey Net90 system. When the plant eventually had funding appropriated for the migration, TCSI won the competitive bid.

The PLC Control System design called for separate pairs of redundant processors. The BMS system would be separate from the CCS system. Rockwell Automations' Ohio facility assembled the system, applying their Burner Management program, as well as their basic Cross Limited/Flow Tie Back Combustion Control philosophy.

Turnkey Control Solutions, Inc. developed their HMI system – three servers running iFIX.

TCSI, as the prime contractor, hired electrical and mechanical subcontractors. VFDs were installed on all of the rotating machinery (pumps and fans).

Additional tasks taken by TCSI included: replacing the steam plant controls, replacing the Bailey DCS with an Allen Bradley PLC, programming the BMS and Combustion Control, incorporating the Press Control into the WWTP PLC, upgrading the Wonderware HMI and incorporate additional network stations, and replacing all field devices. The project was completed on March 30, 2005.