Project: **Former Chrome Foundry**
Location: **Tennessee**
Client: **Confidential**

Foundry Site to Get a Fresh Start

Thanks to the joint efforts of Burns & McDonnell and Commercial Development Company, Inc./Environmental Liability Transfer, Inc., of St. Louis, a former chrome foundry in Tennessee is now a step closer to being brought back into productive use. Contaminated by chromium and other chemicals from the foundry's operations, the site has sat idle for more than 20 years, says Burns & McDonnell project manager Chris Snider. In recent months, the Tennessee Department of Environment and Conservation has allowed the property — along with its environmental liabilities — to be transferred to a new owner. Burns & McDonnell helped facilitate the transfer by developing a remedial action plan to address contaminants found in surface waters and soils. The multimillion-dollar remediation program includes lining and restoring two streams that traverse the site, as well as construction of several landfill caps to prevent further leaching of contaminants. The plan's final design will be submitted to the state of Tennessee for review later this year, with construction scheduled to begin next summer.

For more information, contact Chris Snider, (816) 822-3534.

Project: **Factory Service Center**
Location: **Gainesville, Fla.**
Client: **Eclipse Aviation**

New Hangar Will Support Air-Taxi Service

When you need to travel across town, you might call a taxi service. When you need to travel across state, you may soon be doing the same thing. At least that's what companies like Eclipse Aviation are banking on. Albuquerque-based Eclipse is the maker of the Eclipse 500, a new VLJ — that is, very light jet — designed to transport corporate executives and other passengers on short trips between regional airports. With 2,500 of its new "air taxis" on order, Eclipse enlisted Burns & McDonnell's help in forging a new concept in aircraft maintenance. "The idea is to create regional service centers," says Karen Stelling, associate vice president. "These are essentially aircraft hangars designed for customer support. Owners will simply taxi their planes in for maintenance and service." Burns & McDonnell has performed siting studies for eight such centers around the country. It also provided design services for the first one, which recently opened in Gainesville, Fla. The 61,200-square-foot structure includes a 45,000-square-foot hangar, with 12 service bays to accommodate a dozen Eclipse 500 aircraft. "It's like taking your car back to the dealership for service," Stelling says.

For more information, contact Karen Stelling, (816) 822-3342.

Substation Tightens Grip on Reliability

It may take a village to raise a child, but it takes a reliable substation to power a village. That's why FirstEnergy has invested tens of millions of dollars in recent years to enhance its substation network. Burns & McDonnell has played a significant role in the effort, contributing design and sometimes construction services on hundreds of substation projects. The latest is a $4 million upgrade to a substation in rural Cochranton, Pa. The 345-kV line that passes through the station is a major link in FirstEnergy's transmission system. Working under an EPC (engineer-procure-construct) contract, Burns & McDonnell installed two new 345-kV breakers and created a three-position ring bus arrangement for the substation, greatly enhancing the reliability of its performance. The firm also replaced an existing transformer. FirstEnergy supplied the breakers and transformer. "Enhanced reliability was our goal," explained Burns & McDonnell project manager Joe Leggio. "Because of the key role the line plays in the transmission system, it was also important to complete the work with minimal outages."

For more information, contact Joe Leggio, (816) 822-3843.

Project: **Wayne Substation**
Location: **Cochranton, Pa.**
Client: **FirstEnergy**

Chilled Water System to Double in Size

Everything's bigger in Texas. That includes the medical centers and the central utility plants that deliver chilled water and steam to them. And both are getting bigger. It already takes some 80,000 tons of chilled water and 650,000 pounds per hour of steam from Thermal Energy Corp. (TECO) plants to serve 42 buildings with 13 million square feet of space on Texas Medical Center's campus in Houston. But the world's largest medical center is growing. TECO plans to double both the chilled water and the steam generating capacity over the next dozen years. "The medical center's 50-year master plan calls for expansion to the south, creating a 1,000-acre medical center the size of The Loop in downtown Chicago," explains Burns & McDonnell project manager Blake Ellis. Burns & McDonnell is the design-build contractor to complete the first phase of the expansion, which includes adding 45 megawatts combined heat and power generation, an 8.8 million-gallon thermal energy storage tank and a new chiller plant with 32,000 tons of chilled water production in this phase, with an ultimate capacity of 80,000 tons.

For more information, contact Blake Ellis, (816) 822-3332.

Project: **Combined Heat & Power Plant**
Location: **Texas Medical Center, Houston**
Client: **Thermal Energy Corp. (TECO)**