POWER PLANT
3D SCANNING FOR DESIGN
OF REPLACEMENT PIPING

LOCATION:
East Bend Generating Station, a 648-megawatt coal-fired facility located in Boone County, Kentucky operated by CINERGY Corporation.

TASK:
Babcock & Wilcox, an innovative solutions provider to the world’s growing energy needs, was to oversee the design, fabrication and installation of absorber recirculation replacement piping from the lower outlet through the pump assembly and to the tie-in point on the upper reaches of the FGD tower.

CHALLENGE:
Measuring and quantifying the location of the critical tie-in points and routing of the replacement pipe did not lend itself to conventional surveying measurements. The surveyor originally contacted for undertaking the task recognized this fact and wisely directed their client to the professionals at Exact Metrology, Inc. for assistance.

SOLUTION:
After conferring with the project manager, reviewing the site conditions and understanding the critical elements of the project, a scanning crew arrived on site within one week of the original consultation. Utilizing a Leica 3000 Scanner the area was scanned, yielding a dense overlay of x,y,z coordinates.

DELIVERABLE:
The scanned data was developed into a model which depicted the critical tie-in points.

ADDED VALUE:
While in the facility data was captured on an area of inaccessible piping that was slated for replacement. A model of the pipe routing was also developed.