

## Delta Power Intake/Blowdown Tunnel

Delta, PA



### PROJECT OVERVIEW AND CHALLENGES

The Delta Power Plant project in Delta, PA, consisted of a 565 MW power generating facility that recovers heat from gas exhaust leaving gas turbines. The turbines burn either natural gas or low sulfur diesel fuel oil. A microtunnel solution to installing the cooling water intake and return was developed by the owner, contractor, and tunnel subcontractor. 1,515' of 60" steel casing was jacked under a lake and a 16" HDPE pipe was installed inside. The HDPE pipe transports cooling water to the plant and the annular space between the carrier pipe and the casing returns the water to the lake. The TBM was recovered from under Conowingo Lake along the Susquehanna River.



### PROJECT INFORMATION - 493

#### OWNER:

Calpine Corporation  
Alan Bryce  
610.667.4773

#### ENGINEER:

ALTRAN Solutions  
617-204-1000

#### CONTRACTOR:

CH Schwertner & Sons, Inc.

#### COMPLETION DATE:

6/30/2010

#### GEOLOGY:

Soft Silt, Gravel, Cobbles, Debris

#### EXCAVATION METHOD:

Herrenknecht AVN-1200 MTBM

#### MINING DIMENSIONS:

1,515' x 60" Ø

#### FINAL LINING:

16" High-Density Polyethylene Pipe

#### FOR MORE INFORMATION:

Eric Eisold, Vice President  
410.970.8300  
eeisold@bradshawcc.com  
Refer to Project 493