



Engineers & Consultants

# FOSSIL POWER GENERATION

www.mesainc.com

## COMPANY DATA

**History:** Founded in 1988    Utility Work Since 1990    **Staff:** 380 Employees    53 Professional Engineers

**Utility Industry Sales:** 2007 - \$30 MM (Design Only)  
2006 - \$29 MM (Design Only)

- Clients:**
- Alstom Power
  - APGI
  - Duke Energy
  - E-Crane International
  - E-ON U.S.
  - Progress Energy
  - Tennessee Valley Authority

## COMPANY EXPERIENCE

### Civil/Structural

- Siting
- Soils/Drainage
- Boiler Analysis
- Duct Design/Analysis
- Foundations: Cooling Towers, Fans, SCR
- Platforms

### Mechanical

- Piping Systems:
  - B31.1 – Steam, Compressed Air
  - B31.3 – NH<sub>3</sub>, Propane, Acids/Caustics
  - B31.8 – Natural Gas, Propane
  - B31.9 – Cooling Water
- HVAC Systems:
  - Control Room Upgrades
  - Plant Cooling/Ventilation
- Conveying Systems:
  - Pneumatic Transfer – Adipic Acid
- Mechanical Transfer – Coal, Clay

### Electrical

- Modernization:
  - Generator Upgrades
  - Switchgear/MCC/Breaker Replacement
  - Transformer Replacement
  - Protective Relaying
  - UPS Design
  - VFD Installation
- Studies/Analysis:
  - Load
  - Short Circuit
  - Arc Flash

### Instrumentation & Controls

- Automation & Monitoring:
  - Generator/Exciter
  - Synchronization
  - Breakers
  - Aux Equipment
  - Continuous Process
  - Batch
- Upgrades:
  - Soot Blower Controls
  - Precipitator Controls
  - SOE
  - BMS/CCS
  - Coal Handling Controls

### Integration

- PLC – AB, GE, Modicon, Siemens, Automation Direct
- HMI – Intellution, Wonderware, RS-View, CTC Interact, Lookout
- DCS – ABB, Foxboro, Honeywell
- Machine Control, Continuous Process, Batch

832 Georgia Ave, Ste 300  
Chattanooga, TN 37402  
(423) 424-7300

123 Broad Street  
Kingsport, TN 37660  
(423) 246-0860

10604 Murdock Road  
Knoxville, TN 37932  
(865) 671-5400

9238 Madison Blvd., Ste 116  
Madison, AL 35758  
(256) 258-2100

55 Marley Drive, Suite 2  
Greeneville, TN 37745  
(423) 783-2301

7101 Executive Center Dr., Ste 180  
Brentwood, TN 37027  
(615) 727-1100