

# INDUSTRIAL SOLID FUEL COGENERATION FACILITY

**Client:**

North American  
Energy Services  
Company

**Project Location:**

Tomahawk, WI

**Capacity:**

550,000 lb/hr Solid  
Fuel Boiler; 34 MW<sub>e</sub>

**Approximate  
Installed Value:**

\$Confidential



*PCI was selected by a major North American energy services company to be responsible for developing a comprehensive plan to reduce the Mill's total energy costs at a major paper mill.*

**The scope of work included:**

- Identified energy cost reduction measures within the mill, which reduced energy cost per ton of paper produced
- Developed detailed mill energy balance
- Developed comprehensive plan for new solid fuel energy project
- Perform economic analysis of alternatives
- Prepared all preliminary design drawings that included:
  - New multi-solid fuel boiler designed to burn biomass, coal and TDF)
  - 34 MW double extraction, condensing steam turbine cogeneration unit
  - Multi-fuel handling system (coal, TDF and biomass)
  - Electrical interconnect
- Prepared specifications for all major equipment
- Prepared specifications for engineering, procurement contract (EPC) and selected EPC contractor
- Investigated several low-cost financing alternatives
- Developed a detailed operating plan and budget for new solid fuel facility

