Award Winning Senior Design Project

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Location

- The property is located near Waynesburg, Pennsylvania.
• Mining horizon: Pittsburgh Coal Seam
Quality & Marketing

- Coal: 7.2’ Average
- Ash: 7.38% Average
- Sulfur: 2.23% Average
- SO₂: 3.16 lbs Average
- BTU: 14,200 Average

- Sold to Hatfield’s Ferry Power Station for steam coal purposes
Longwall Equipment

- Underground Longwall Coal Mine
  - AFC
  - Joy Shields
  - Shearer
  - Shuttle Car
  - Joy CM
• Actual clean output yield of $\approx 85\%$ based on 95\% Plant Efficiency
Economic Summary

- 5.3 Million Tons Per Year Clean Coal Produced
- 221 Employees
- Internal Rate of Return 16%
- $5.08 Million Net Present Value at 15%

*Figure 15.1: Financial Summary Cash Flow Chart*
PCMIASME Student Design
Gold Award

• Photo: Dr. Keith Heasley, Hilaria Ireland, Rebecca Hardy, & Professor Dan Alexander