Sand Valley Landfill Gas to Electricity Project

A Real Community Success Project

Steve Cowman, President
Energy Developments, Inc.

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Energy Developments, Inc. established the US clean energy business in 1998.

US Corporate headquarters located in Nashville, Tennessee.

Currently operating 94MW of Landfill Gas to Electricity in 8 projects across 5 States.

Added over 30MW to the US business in the last 4 years.

Energy Developments is the US operating subsidiary of Energy Development LTD. a global leader in Remote and Clean Energy.

Energy Developments, LTD. companies operate 84 projects generating over 900 MW of electricity in 4 countries across 3 continents.
The Project

Generation Capacity
- 4.8 MW

Location
- Collinsville, Alabama

Project Developer/Owner
- Energy Development, Inc.

Landfill Owner
- Republic Services

Interconnecting Utility
- Sand Mountain Electric Coop

Power Purchase Agreement
- Tennessee Valley Authority

General Contractor
- Industrial Power Systems
• Landfill with limited gas collection system
  – Republic was in the process of expanding the gas collection system
  – Gas flows at the time were approximately 1200 SCFM
  – Gas flows at one point were projected to be 2200 SCFM after expansion of the gas system
    – Gas flows were ~ 1800 after the wellfield expansion
    – EDI installed 3 CAT 3520 engines

• Landfill Support Solutions
  – Low volume flare allowed for greater wellfield vacuum control
  – New blower skid provide additional coverage to collect maximum gas
  – Ongoing local site interaction to identify and correct wellfield and other issues
• Sand Mountain Electric Coop
  – Serving 30,700 members in 4 counties in northeastern Alabama
  – Sand Mountain had no generation in their system
  – EDI’s 4.8 MW generation exceeded the power demand of the local community
  – Sand Mountain Electric was skeptical

• Solution
  – Power generated from the project is sold to TVA under their; “Renewable Standard Offer Contract”
  – Interconnection required a 9 mile dedicated feeder line
  – To make the final interconnection Sand Mountain Electric Coop had to cut off all power to the City of Collinsville, Alabama for approximately 3 hours

At this point the entire community became committed to the project
• Local Champion for the project
  – DeKalb Commissioners Approvals
  – DeKalb County Tax Abatement
  – Local building and siting permits

• State of Alabama Permitting
  – Air Permit
  – Annual Compliance Inspection

• Alabama Department of Revenue
  – Sales Tax Exemption
  – E Verify System

• Solution
  – DeKalb County Economic Development Authority
    – Provided introductions and guidance for all state and local agencies
Earth Day 2014 - Ribbon Cutting Day
Engine Room - Ready for the tour
6th graders from the local middle school
Local residents and officials
Our Partners and local officials