ALTERNATIVE DELIVERY METHODS FOR DEVELOPING A LANDFILL GAS-TO-ENERGY PROJECT

Presented By:

Rick Sapir
Hawkins Delafield & Wood LLP
esapir@hawkins.com
(973) 642-1188
CONTRACT DELIVERY METHODS FOR LANDFILL GAS-TO-ENERGY PROJECTS

- Design-Bid-Build (Public Operations)
- Design-Build-Operate (Public Ownership)
- Design-Build-Own-Operate (Developer Model)
DESIGN-BID-BUILD
(Conventional Public Works Delivery Method)

- Engagement of Design Engineer
- Procurement of General Contractor By Landfill Owner Based on Price
- Guaranteed Price and Schedule by G.C.
- No Guarantee of Performance
- Landfill Owner Operator
- No Long-Term Guarantee
Example DBB Project – Monmouth County, New Jersey – 1 MW LFG Project

- 1 MW
- 1 Generator
- Jenbacher Engine
MONMOUTH COUNTY OBJECTIVES AND PROCUREMENT OF 1 MW LFG PROJECT

- County Objectives:
  - Offset Electricity Costs at County-owned Facility Adjacent to Project Site
  - Take Advantage of State Incentives (NJBPU Grant - 25%) and Low Interest Rates
  - Develop Additional Renewable Energy Project

- Procurement:
  - Local Public Contracts Law
  - Lowest Responsible Bidder
COUNTY’S 1 MW LFG PROJECT

- County applied for and received grant from the New Jersey Board of Public Utilities in the amount of $800,000
- County financed remaining cost of project ($2.4 Million)
- 1 MW generator utilizes the 450 cfm of gas reserved pursuant to a Separate Gas Rights Agreement (discussed later)
COUNTY’S 1 MW LFG PROJECT (Cont.)

- Net Metering
- Interconnection Agreement with Local Utility
- Produces enough electricity to offset up to $1 million per year of County’s electricity costs at County’s Materials Processing and Recovery Facility
- Generates revenue from sale of Renewable Energy Certificates via an online auction platform
SIGNIFICANT BENEFITS AND DRAWBACKS OF PUBLICLY OWNED DBB PROJECT

**BENEFITS**

- Most Control
- Reap Entire Financial Benefit
- Grant Funding
- Tax Exempt Debt

**DRAWBACKS**

- CapEx
- Most Risk
- More Headaches
- No Tax Benefits
- Limited Expertise
- No Long-Term Guarantor of Performance or Revenues
- More Responsibility (e.g. interconnect, off-take)
DESIGN-BUILD-OPERATE (Public Ownership)

- Procurement of D-B-O Team Through RFP
- Development of Minimum Technical Requirements By Owner’s Advisor
- Selection on Price and Other Factors
- Contractually Guaranteed Price, Schedule and Performance
- D-B-O Operator
  - Long-Term Guaranteed O&M Price
  - Long-Term Guaranteed Performance
- Landfill Owner Responsible for Interconnect and Off-take
EXAMPLE DBO DELIVERY METHOD – U.S. VIRGIN ISLANDS

- Virgin Islands Waste Management Authority Issued an RFP for the Development of a Landfill Gas-to-Energy Project (less than 1 MW) at the Bovoni Landfill on St. Thomas

- Grant Money Used to Finance Project ($3.1M)

- Design, Build, Operate Contract Negotiated and Executed

- Facility Constructed But Not Operating
AUTHORITY OBJECTIVES

- Long-term Beneficial Use of Landfill Gas
- Reduce Odors
- Take Advantage of Grant Funding
DBO SERVICE CONTRACT HIGHLIGHTS

- Guaranteed DB Price and Schedule
- Guaranteed Long-Term O&M Price
- Performance Guarantees – Electric Power Production Guaranty
- Contract Security
  - Escrow Agreement
  - Payment and Performance Bond
## SIGNIFICANT BENEFITS AND DRAWBACKS OF DBO LFG PROJECT

<table>
<thead>
<tr>
<th>BENEFITS</th>
<th>DRAWBACKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Control</td>
<td>CapEx</td>
</tr>
<tr>
<td>Grant Funding</td>
<td>No Tax Benefits</td>
</tr>
<tr>
<td>Performance Guarantees</td>
<td>Responsibility for Interconnect and Off-take</td>
</tr>
<tr>
<td>Long-Term O&amp;M Cost Guarantees</td>
<td></td>
</tr>
</tbody>
</table>
DESIGN-BUILD-OWN-OPERATE
(Developer Model)

- Procurement of DBOO Team
- No Public Capital Expense
- Long-term Risk and Responsibility on Developer
EXAMPLE DBOO DELIVERY METHOD –
Monmouth County, New Jersey

- In 1995, Monmouth County entered into a Gas Rights Agreement with a wholly owned subsidiary of Montauk Energy (Montauk)

- Montauk developed a 10MW LFG facility at the County’s Reclamation Center

- The parties entered into an Amended and Restated Gas Rights Agreement in 2006
MONTAUK’S 10MW LFG FACILITY AT THE MONMOUTH COUNTY RECLAMATION CENTER

- 10 MW
- 2 Solar Taurus 60 Combustion Turbines
COUNTY OBJECTIVES FOR DBOO LFG PROJECT

County Objectives:
- Receive revenue from licensing of rights to gas produced at the existing Landfill
- Minimize capital expense
- Have private company own, operate and maintain energy generating facilities to minimize risk
COUNTY OBJECTIVES FOR DBOO LFG PROJECT (Cont.)

- Same private company to share in responsibility for collection system

- Reduce odors/odor complaints

- Reduce costs associated with flare
LEGAL CONSIDERATIONS REGARDING PROCUREMENT OF DBOO LFG PROJECT

- Exceptions to Competitive Bidding

- Long Term Contract Allowed Under State Law
  (N.J.S.A. 40A:11-15)
ROYALTY PAYMENTS

■ Monthly Royalty Payments Based on Percentage of Gross Revenues from the Project

■ Gross Revenues Include:
  - Electricity
  - Availability
  - Capacity
  - RECs
  - Anything Else, Including Future Benefits

■ Minimum Monthly Royalty Payment Required
SIGNIFICANT BENEFITS AND DRAWBACKS OF PRIVATELY OWNED DBOO PROJECT

**BENEFITS**
- No Upfront Capital Expenditure
- No Risk
- Partner with Significant Expertise
- Private Tax Benefits
- Limited Hassles
- No Responsibility for Interconnect and Off-take

**DRAWBACKS**
- Smaller Share of Financial Benefit
- Less Control
- No Grants or Tax Exempt Debt
- Long-Term Commitment
CONCLUSION

■ Benefits and Drawbacks to Each Delivery Method

■ All Models Can Be Successful