



Due Diligence Lessons Learned

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*Global Presence
Local Solutions*

Variety of Circumstances for Due Diligence Review

- Purchase of commercial utility
- Sale of commercial utility
- Lender's due diligence
- Public-Private Partnerships, with a wide variety of deal structures, e.g.
 - Design-Build-Own-Operate-Maintain (DBOOM)
 - Design-Build-Own-Operate-Transfer (DBOOT)
 - Design-Build-Finance-Operate-Maintain (DBFOM)

Due Diligence Lessons Learned

- Market analysis
- Customer contract analysis
- Plant and distribution system CAPEX analysis
- Operating costs and metrics analysis
- Financial analysis
- Regulatory risk analysis
- Country risk analysis

Due Diligence Lessons Learned
Market Analysis

Market Analysis

- Don't accept the seller's market assessment
- District energy market growth is directly related to the real estate market
- Talk to independent market resources
 - Engineering consultants
 - Ex-employees of target and/or competitors
- Be conservative when converting real estate growth into district cooling capacity growth
- Take into account competition from other district energy utilities and developer's choice to not out source
- Growth assessment may have a major impact on valuation
- Don't be afraid to apply a conservative view

Due Diligence Lessons Learned

Customer Contract Analysis

Customer Contract Analysis

- Key non-legal issues
 - How much time is left before contract expiration?
 - How can the contract be extended or renewed? Is there any transfer language?
 - Does the contract contain any variable price risk to the target?
 - How can contract prices be adjusted? Is there a track record of price adjustments?
 - How can the contract be assigned?
 - Can the contract be terminated for other than non-performance issues?
 - Is contract capacity specified? Are performance metrics specified and are they being met?
 - Does the contract contain any buyout or transfer option?

Due Diligence Lessons Learned
Plant & Distribution
CAPEX Analysis



Plant & Distribution CAPEX

- Projecting future capital investment
 - Use current actual and/or updated estimated cost per unit of installed capacity
 - Historical costs can be significantly skewed based on the ebb and flow of the markets for contracting, equipment and materials
- Understand the CAPEX difference between all new plant and distribution system and expansion of existing system
- Verify that CAPEX for planned distribution system expansions is sufficient given system hydraulics
- How does contracted load compare to
 - Actual peak load?
 - Installed capacity?
- What CAPEX investments will be required under any BOOM/BOOT deals?

Plant & Distribution CAPEX, cont.

- What are the ages and conditions of existing assets? What are the estimated remaining service lives?
- Will poor Delta T constrain achieving full capacity of plant and distribution assets?
- How much maintenance CAPEX is being spent and what is the trend?
- Beware simplified estimates of distribution system expansion
 - Trench feet per unit of capacity sold
 - Distribution system design and specs consistent with expected service life

Due Diligence Lessons Learned

Operating Costs & Metrics Analysis



Operating Costs & Metrics Analysis

- What is the gross margin? What is the trend and why?
- How will margins be affected by
 - Load growth?
 - Load shrinkage due to efficiency measures?
- What are the trends in production efficiencies (fuel, electricity, water)?
- What are the opportunities for efficiency improvement?
- What is the outlook for prices of production inputs?
- What do outage records tell you about the O&M practices?
- How much is spent on asset maintenance and what is the trend?
- Is there a good water treatment program?
- Are risks and rewards for Key Performance Indicators (KPIs) well-aligned?

Due Diligence Lessons Learned

Regulatory Risk Analysis



Regulatory Risk Analysis

- What are the terms of air and water permits and when are they up for renewal? Will they accommodate envisioned growth?
- What is the vulnerability to (or potential competitive advantages of) carbon regulation?
- What is the current status of district energy regulation affecting the target?
- Are there regulatory changes anticipated? Do any of these include price regulation?

Due Diligence Lessons Learned

Financial Analysis



Financial Analysis

- Debt
 - How is it structured?
 - What is the security?
- Receivables
 - What is the average receivables period?
- What are vulnerabilities to non-renewal of BOO/BOOT deals?
- Is variable revenue covering
 - Variable costs?
 - Some fixed costs?
- Cash flow vs. income

Due Diligence Lessons Learned

Country Risk Analysis

Country Risk Analysis

- Rigorously assess country risk
- Country risk is different for international buyers than for regional buyers

Final Thought

- Would you rather see your client
 - Bid fairly and lose, or
 - Win and find out three years later that they overpaid based on your assessment and are **not** happy?



Thanks for your attention!

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