PA Energy Services Coalition
Second Annual Workshop

2012/13 EPC Financing Options and Current Market

November 14, 2012
Interest Rates

- Interest rates in the municipal market can be volatile but are near record lows

Source: Federal Reserve
Web Address: http://www.federalreserve.gov/releases/h15/data.htm
Industry Trends - Credit

<table>
<thead>
<tr>
<th>District or Municipality</th>
<th>Date Filed</th>
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</thead>
<tbody>
<tr>
<td>Mendocino Coast Recreation &amp; Park District, CA</td>
<td>12/29/2011</td>
</tr>
<tr>
<td>Stockton, CA</td>
<td>6/28/2012</td>
</tr>
<tr>
<td>Mammoth Lakes, CA</td>
<td>7/3/2012</td>
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<tr>
<td>San Bernardino, CA</td>
<td>8/1/2012</td>
</tr>
<tr>
<td>Boise County, ID*</td>
<td>9/8/2011</td>
</tr>
<tr>
<td>Lost Rivers District Hospital, ID</td>
<td>3/10/2010</td>
</tr>
<tr>
<td>Sanitary and Improvement District #512, NE</td>
<td>11/1/2011</td>
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<tr>
<td>Lake Lotawana Community Improvement District, MO</td>
<td>8/27/2010</td>
</tr>
<tr>
<td>Rural Water District No. 1, OK</td>
<td>1/23/2012</td>
</tr>
<tr>
<td>Centerton Muni Property's Owner Imp. Dist. No. 3, AR</td>
<td>10/12/2011</td>
</tr>
<tr>
<td>Sylamore Valley Water Association, AR</td>
<td>4/19/2012</td>
</tr>
<tr>
<td>Grimes County MUD #1, TX</td>
<td>3/4/2010</td>
</tr>
<tr>
<td>Jefferson County, AL</td>
<td>11/9/2011</td>
</tr>
<tr>
<td>Hospital Authority of Charlton County, GA</td>
<td>4/30/2012</td>
</tr>
<tr>
<td>Barnwell County Hospital, SC</td>
<td>10/5/2011</td>
</tr>
<tr>
<td>The Southern Connector</td>
<td>6/24/2010</td>
</tr>
<tr>
<td>Harrisburg, PA*</td>
<td>3/10/2012</td>
</tr>
<tr>
<td>Suffolk Regional Off-Track Betting Corp., NY*</td>
<td>5/11/2012</td>
</tr>
<tr>
<td>Central Falls, RI</td>
<td>8/1/2011</td>
</tr>
</tbody>
</table>

*Bankruptcy Filing Rejected

Source: Governing
Industry Trends - Credit

*Headline risk has again become a concern*…

Increased credit scrutiny and due diligence:
- 5 year assessed value history/enrollment histories
- Top 10 taxpayers
- Current financials
- Existing debt structure/debt covenants
- Pension fund liabilities

Investor pool for financing Energy Projects is adequate but becoming more selective:
- Minimum deal size/size of issuer
- Potential for cross-sell
- Term limitations for regional sources
- Revenue pledge for longer terms/Larger projects for smaller issuers
The financing markets have become bifurcated between riskless credits and those displaying perceived risk…

Potential Elements of a Riskless Transaction:

- Highly rated host customer (i.e. Moody’s Aa1)
- Deal sizes in excess of $2MM to $5MM
- Larger entities in terms of population, student census, tax base, etc.
- Strength of financial statements
- 15 year terms or less
- Project features larger ESCO
Industry Trends – Access to Capital

The financing markets have become bifurcated between riskless credits and those displaying perceived risk…

“Perceived” Risks May Include:

- Unrated host customer
- Deal sizes less than $2MM
- Smaller entities in terms of population, student census, tax base, etc.
- Strength of financial statements
- 16 year terms or more
- Projects featuring smaller ESCOs
- No relationship between host and lender
EPC Financing Alternatives

Tax-Exempt Lease Purchases
- Appropriation Language
- Privately Placed
  - Certificates of Participation (COPs)
  - Serialized Payment Structure

General Obligation Bonds/Tax Notes/Revenue Bonds
- Creates Long-Term Debt
- May require Debt Covenants
- Can be sold as a Private Placement
- May Require Voter Approval

Both Can Be Issued as Qualified Tax-Credit Bonds
- QSCBs/QECBs/QZABs
Private Placement Vs Public Security

**Private Placement**
- Little or no origination costs
- Shorter implementation time frames
- Greater flexibility for credit and size
- “Interest Rate Lock” period
- No additional disclosure requirements

**Public Security**
- Origination and underwriting Costs
- “Best Efforts” pricing
- Ongoing disclosure requirements
- Longer turnaround times
- Aggressive pricing for larger deal size/longer tenors
Tax-Exempt Lease Purchase Highlights

- Very popular & established financing vehicle
- Tax exempt rates (unless direct subsidy QTCB)
- 30-60 day rate locks (private placement)
- Subject to annual appropriations
- Up to 20 year terms
- Public entity holds title to equipment/Lender takes collateral
- Does not require voter approval
- May not count against bond (debt) capacity
Certificates of Participation - Highlights

- Still a Tax-Exempt Lease Purchase
- Best efforts pricing – Rates are not locked until 5-10 days prior to funding
- Subject to annual appropriations/no voter approval/does not count as debt
- Up to 20 year terms
- Costs of Issuance are rolled up into financing
- Construction period interest capitalized
- Public credit ratings/Official statements/Ongoing disclosures
## Capital Solutions

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Tax-Exempt Municipal Lease</th>
<th>Certificate of Participation</th>
<th>Taxable Lease Purchase*</th>
<th>Tax-Exempt Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td>Tax-Exempt</td>
<td>Tax-Exempt</td>
<td>Taxable</td>
<td>Tax-Exempt</td>
</tr>
<tr>
<td>Creates Long Term Debt?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Speed of Implementation</td>
<td>Days to Weeks</td>
<td>Weeks to Months</td>
<td>Days to Weeks</td>
<td>Months</td>
</tr>
<tr>
<td>Issuance Costs</td>
<td>Typically None</td>
<td>Approximately 2% of Amount Borrowed</td>
<td>Depends on Type of Issue</td>
<td>Approximately 2% of Amount Borrowed</td>
</tr>
<tr>
<td>Subject to Annual Appropriations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Disclosure Required</td>
<td>None</td>
<td>Yes</td>
<td>Yes if Issued as Public Security</td>
<td>Yes</td>
</tr>
<tr>
<td>Privately Placed or Public Security</td>
<td>Privately Placed</td>
<td>Public Security</td>
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<td>Public Security</td>
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</table>

*typically used when issuing a qualified tax-credit bond structure
Qualified Energy Conservation Bonds

- Authorized under Emergency Economic Stabilization Act of 2008, with an initial national allocation of $800 million

- Expanded by American Recovery and Reinvestment Act of 2009, with the national allocation increased to $3.2 billion

- Modified by Hiring Incentives to Restore Employment Act of 2010, to enable a direct-pay interest subsidy by the U.S. Treasury to the issuer
QECB Allocations

- National QECB allocations are sub-allocated to each State based on population
- States then reallocate to “large local governments” (any municipality or county that has a population of 100,000 or more)
- A City’s population is subtracted from the County’s to determine its allocation
- Large local government can reallocate its portion back to the State or to an eligible issuer
- No more than 30% of any allocation to a State or large local government can be used for private activity bonds
General Characteristics

- Proceeds must be used for capital expenditures that reduce energy consumption in publicly-owned buildings by at least 20%
  - 100% of proceeds must be used for project
  - 3 year expenditure requirement
  - 2% allowed for issuance costs

- All state and local governments qualify as permitted issuers under the QECB program

- QECBs are taxable, but post-subsidy net yields are more favorable than tax-exempt
General Characteristics

- QECBs can be structured as lease-purchases (subject to annual appropriations) and issued as private placements

- Bondholders receive a tax credit, or Issuers receive a direct-pay interest subsidy

- Issuer submits interest subsidy request (IRS form 8038-CP) 45 days prior to interest payment due date
  - can be handled by escrow agent
  - usually quarterly or semi-annual

- The fixed QTC rate is set on the first day on which there is a binding and written contract for the sale of the bonds
Interest subsidy is lesser of (a) actual interest costs, or (b) 70% of the interest costs up to the QECB rate.

See [https://www.treasurydirect.gov/GA-SL/SLGS/selectQTDate.htm](https://www.treasurydirect.gov/GA-SL/SLGS/selectQTDate.htm) for daily updates of the tax credit rate and maximum maturity.

As of November 9, 2012:
- QTCB rate 4.16%
- Maximum term is currently 23 years (all-in)

**Economic Example:** If City/County issues a QECB at a 4.50% taxable rate, they will receive an interest subsidy from the U.S. Treasury equal to 4.16% x 70% or 2.91%; so the District’s net interest rate = 1.59%
QECBs Pros & Cons

- Projects under a QECB are subject to the Federal Davis-Bacon Act prevailing wage laws
- Strong market for private placement of taxable lease purchases
- Lower rates should assist tight cash flow projects/increase scope
- Maximum term changes but currently 23 years including construction
- Smaller local governments can apply but requires allocation approval
- Be careful when modeling! Not just plugging in net rate. We’re glad to help!
## Qualified Tax-Credit Bonds

<table>
<thead>
<tr>
<th>Tax Benefit</th>
<th>Allocation Method</th>
<th>Subject to Davis-Bacon Act</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Build America Bonds (BABs)</strong></td>
<td>35% of Interest Paid</td>
<td>Nonrequired</td>
<td>Rates typically less than tax-exempt</td>
</tr>
<tr>
<td><strong>Qualified School Construction Bonds (QSCBs)</strong></td>
<td>100% of QTCB rate</td>
<td>Allocations made on State Level</td>
<td>40% Allocated to large districts</td>
</tr>
<tr>
<td><strong>Qualified Energy Conservation Bonds (QECBs)</strong></td>
<td>70% of QTCB rate</td>
<td>Allocations made on State Level</td>
<td>Reduce energy consumption by 20%</td>
</tr>
<tr>
<td><strong>Clean Renewable Energy Bonds (CREBs)</strong></td>
<td>70% of QTCB rate</td>
<td>Requires bidding</td>
<td>Available to electric coops</td>
</tr>
</tbody>
</table>

### Key Points
- **Rates typically less than tax-exempt**: 40% allocated to large districts.
- **Reduce energy consumption by 20%**: Available to electric coops.
Current Trends in the Marketplace Driving Public Private Partnerships:

- Tax Revenues Trending Downward
- Reluctance to Raise Revenue Via New Taxes
- Reluctance to Raise Revenue Via Increasing Taxes
- Reluctance to Use Cash Reserves
- Reluctance to Incur Additional Debt
- Host Customer MUST have a need
- Focus on Off-Balance Sheet / Off-Credit Solutions
Energy Related P3 Structures

Energy Related Public-Private Partnerships:

- Energy Savings Agreements
  - Used for Performance Contracts

- Utility Services Agreements
  - Used for Utility Producing Projects
Typical Co-Development P3 Model

- Financial development & modeling
- Transaction structuring & documentation
- Contractor management
- Project ownership & management
- Project capitalization
- Tax credit & incentive monetization
- Project administration
- Regulatory & legal compliance

Co-Development Team

EPC/O&M Contractor(s)
- Project development, engineering and design
- Equipment & technology planning & procurement
- EPC contracting and construction management
- Sub-contractor and vendor bidding, selection and management
- Plant operation & maintenance

Host Client/Off-taker(s)

Legal
Tax/Acct
Regulatory

Design
Architect
Engineer
Contact Information

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