MLPs for Renewables: Complement or Substitute for Tax Credits?

Presented to: Renewable Energy M&A Transactions

Presented by: Robert S. Mudge

December 6, 2011
About The Brattle Group

♦ Consulting and expert testimony in economics, finance, and regulation
♦ 200 people in six offices and affiliations with leading experts
♦ Key practice areas:
  • Energy and Utilities
  • Commercial and Financial Litigation
  • Tax, Valuation, and Securities
  • Other network industries
♦ Clients include:
  • More than 100 of the Fortune Global 500
  • More than 80 of the top law firms in the “AM LAW 100”
  • In more than 40 countries around the world
♦ For more information visit www.brattle.com
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Opened in: 1996

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Europe

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Opened in: 1997

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Opened in: 2005

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Opened in: 2008
Recent Brattle Work in...

Renewables

- FERC testimony on behalf of Atlantic Wind Connection
- Regulatory support for wind developer facing curtailment
- Projection of REC prices for midwest wind developer
- Advice to MA Attorney General in review of Cape Wind PPA
- Renewables integration cost estimates for several utilities
- Economic impact of renewable energy development for an RTO

MLPs

- Key contributor to FERC technical conference on MLPs in 2008
- Testimony before FERC on cost of capital for pipeline MLPs
- Valuation of MLP assets
Industry/ Policy Dialogue on MLPs for Renewables

♦ Chadbourne & Parke (3/2006)
♦ AWEA (11/2010)
♦ Bipartisan Policy Center (3/2011)
♦ Congressional Research Service (6/2011)
♦ Hudson Clean Energy Partners (9/2011)
Context for Discussion

1. Limitations of tax credits
2. MLPs a complement to tax credits
3. MLPs “in lieu of tax credits”?

For illustration, focus on wind
1. Limitations of Tax Credits

Integral to renewable industry since 1990s...

...but face key challenges:

♦ “Friction” of 3rd party tax equity

♦ Diminished absorption in weak economy

♦ End of treasury grants (stimulus program)
1. Limitations of Tax Credits

*High cost of tax equity:*

♦ Finite universe of investors

♦ Industry focus needed (not just tax appetite)

♦ Debt-like risks…

…but pre-tax equivalent cost of capital has ranged from 9% - 15%*

* * USPREF, September 2011
1. Limitations of Tax Credits

Tax investor pool is contracting…

…while tens of billions in North American renewables investment is projected*

* Bloomberg New Energy Finance, November 2011
1. Limitations of Tax Credits

Expiration of Treasury Grants:

♦ Treasury grants in lieu of tax credits took friction out of the system

♦ Program expires at year end 2011
2. MLPs as Complement to Tax Credits

Key characteristics of MLPs:

- Publicly traded partnership
- Pass-through tax treatment
- Qualifying income passive, except “mineral or natural resource[s]”
- Partnership terms require most cash paid out
- Key differences from customary wind financing:
  - Public float
  - Individual investors

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2. MLPs as Complement to Tax Credits

*Perceived incremental benefits:*

- Expanded population of “tax-equity” investors
- Standardization and greater liquidity
- Reduced cost of capital

*But, without change in law:*

- Renewable MLPs would be taxed like C-Corps.
- Passive loss and at-risk rules limit appetite for tax credits
### 2. MLPs as Complement to Tax Credits

**Is legislative push worth the effort?:**

<table>
<thead>
<tr>
<th>Threshold Issues:</th>
<th>Key Considerations:</th>
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<tbody>
<tr>
<td>♦ Reduced cost of capital?</td>
<td>▪ Tax efficient route to public markets</td>
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<tr>
<td></td>
<td>▪ Breadth of investor pool</td>
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<td></td>
<td>▪ Liquidity benefits</td>
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<td></td>
<td>▪ Capital structure options</td>
</tr>
<tr>
<td>♦ Renewable energy assets suitable?</td>
<td>▪ Project maturity and stability</td>
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<td></td>
<td>▪ Potential portfolio diversification</td>
</tr>
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<td>▪ Growth prospects</td>
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<td>♦ Appetite from investing public?</td>
<td>▪ Individual investment opportunity</td>
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<td>▪ Existing mutual funds and ETFs</td>
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<td>▪ Due diligence and management</td>
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2. MLPs as Complement to Tax Credits

Public ownership introduces new dimensions of economic performance:

- Going concern vs. standalone projects
- Growth imperative:
  - Economies of scale and other efficiencies
  - Accretive transactions
  - Financial leverage
2. MLPs as Complement to Tax Credits

More analysis needed:

- Benefits to electricity consumers
- Impact on tax base
- Impact on existing tax equity markets
- Incremental economic activity and jobs
- Public support for renewables
3. MLPs “in lieu of tax credits”?

- Possible expiration of tax credits after 2012
- Glide path to Grid Parity
- MLPs the right structure for the future?

Maybe, but no substitute for tax credits
Glide Path to Grid Parity – Wind Example

Level Real New Generation All-In Cost Estimates

- CO2 at $100/ton
- CO2 at $30/ton
- CO2 at $10/ton
- Fuel
- O&M
- Capital

Gas CC @ 50% CF

Onshore Wind @ $2000/ kW
3. MLPs “in lieu of tax credits”?

*However, interim costs of wind integration remain:*

- Various integration studies for CAISO, NYISO, ERCOT, NREL, and SPP have employed distinct methodologies…
  …but yield consistent results:
- Studies have estimated interim integration costs at $5 to $20 per MWh
- These costs will be mitigated in due course by:
  - Improved forecast data from renewables
  - Wind dispatch/ operating protocols
  - Intra-hourly scheduling
  - Mechanisms to improve use of existing generation
  - Alternative technology incentive programs
3. MLPs “in lieu of tax credits”?

Potential interim costs of wind integration

Level Real New Generation All-In Cost Estimates

2011 $/MWh

Gas CC @ 50% CF

Onshore Wind @ $2000/ kW

CO2 at $100/ton
CO2 at $30/ton
CO2 at $10/ton
Fuel
O&M
Capital
3. MLPs “in lieu of tax credits”?

With some additional leverage, MLP appears to offset loss of PTC based on yield of 8%…
(example of 100MW wind project)

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<th>Delta</th>
<th>MLP Yield</th>
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* Pre-tax
3. MLPs “in lieu of tax credits”?

…but total return target of 11% would require increased revenues to maintain economics:

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