The Brattle Group

MLPs for Renewables: Complement or Substitute for Tax Credits?

Presented to:
Renewable Energy
M&A Transactions

Presented by:
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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**

Offices

North America

Cambridge, MA
Opened in: 1990

Washington, DC
Opened in: 1996

San Francisco, CA
Opened in: 2002

Europe

London, England
Opened in: 1997

Brussels, Belgium
Opened in: 2005

Madrid, Spain
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:

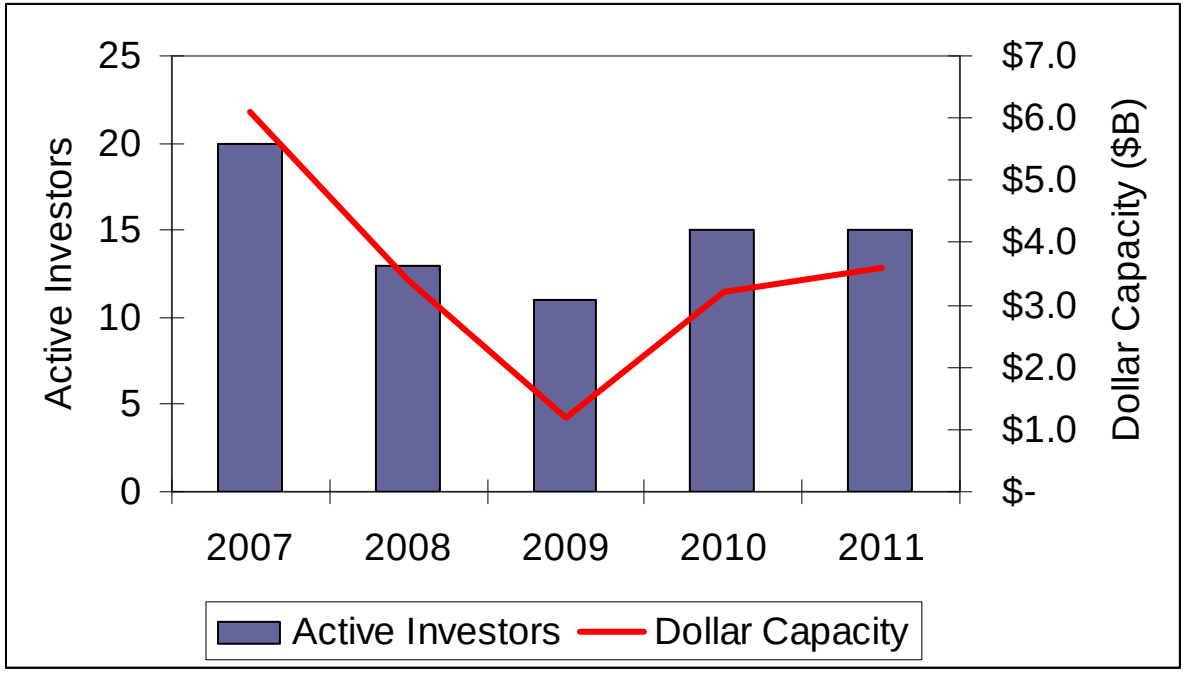
- Finite universe of investors
- Industry focus needed (not just tax appetite)
- Debt-like risks…

…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…



Source: USPREF

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

* Bloomberg New Energy Finance, November 2011

1. Limitations of Tax Credits

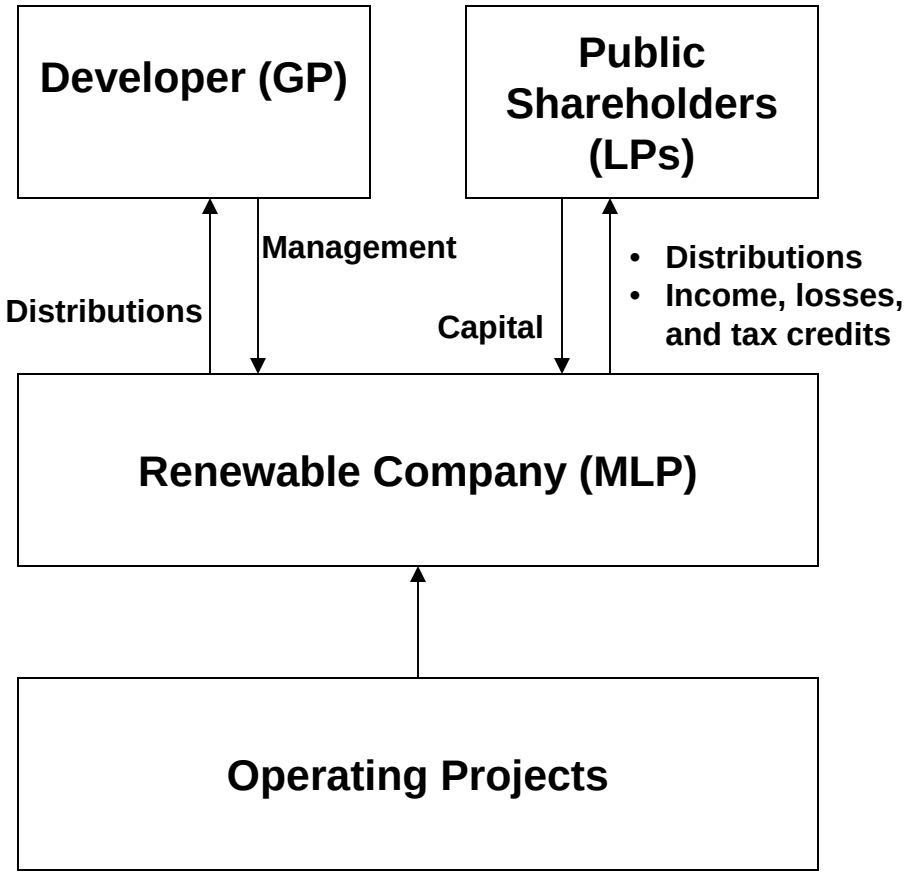
Expiration of Treasury Grants:

- 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



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?:

Threshold Issues:	Key Considerations:
♦ Reduced cost of capital?	▪ Tax efficient route to public markets ▪ Breadth of investor pool ▪ Liquidity benefits ▪ Capital structure options
♦ Renewable energy assets suitable?	▪ Project maturity and stability ▪ Potential portfolio diversification ▪ Growth prospects
♦ Appetite from investing public?	▪ Individual investment opportunity ▪ Existing mutual funds and ETFs ▪ Due diligence and management

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

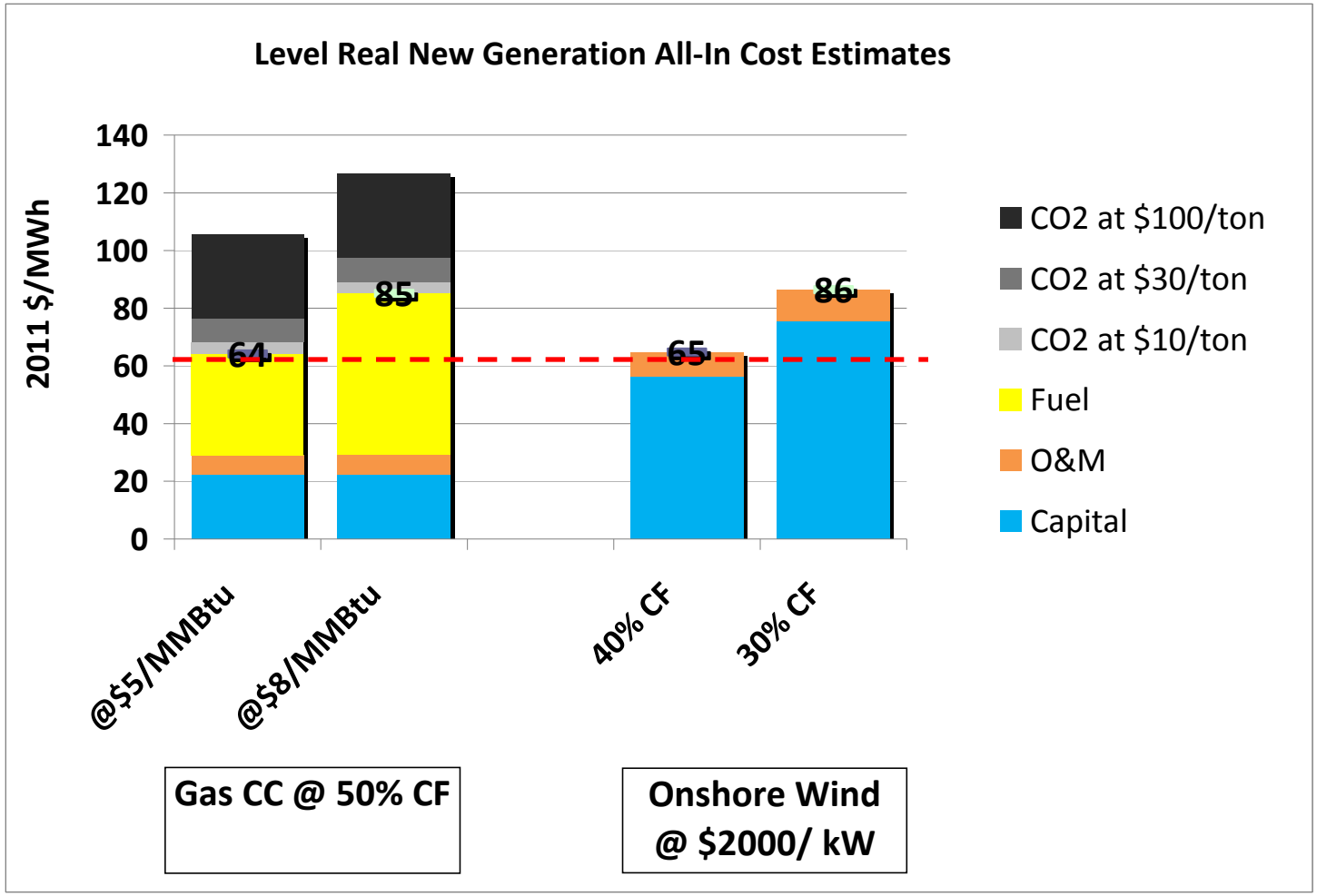
3. MLPs “in lieu of tax credits”?

- 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**

3. MLPs "in lieu of tax credits"?

Glide Path to Grid Parity – Wind Example



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3. MLPs "in lieu of tax credits"?

However, interim costs of wind integration remain:

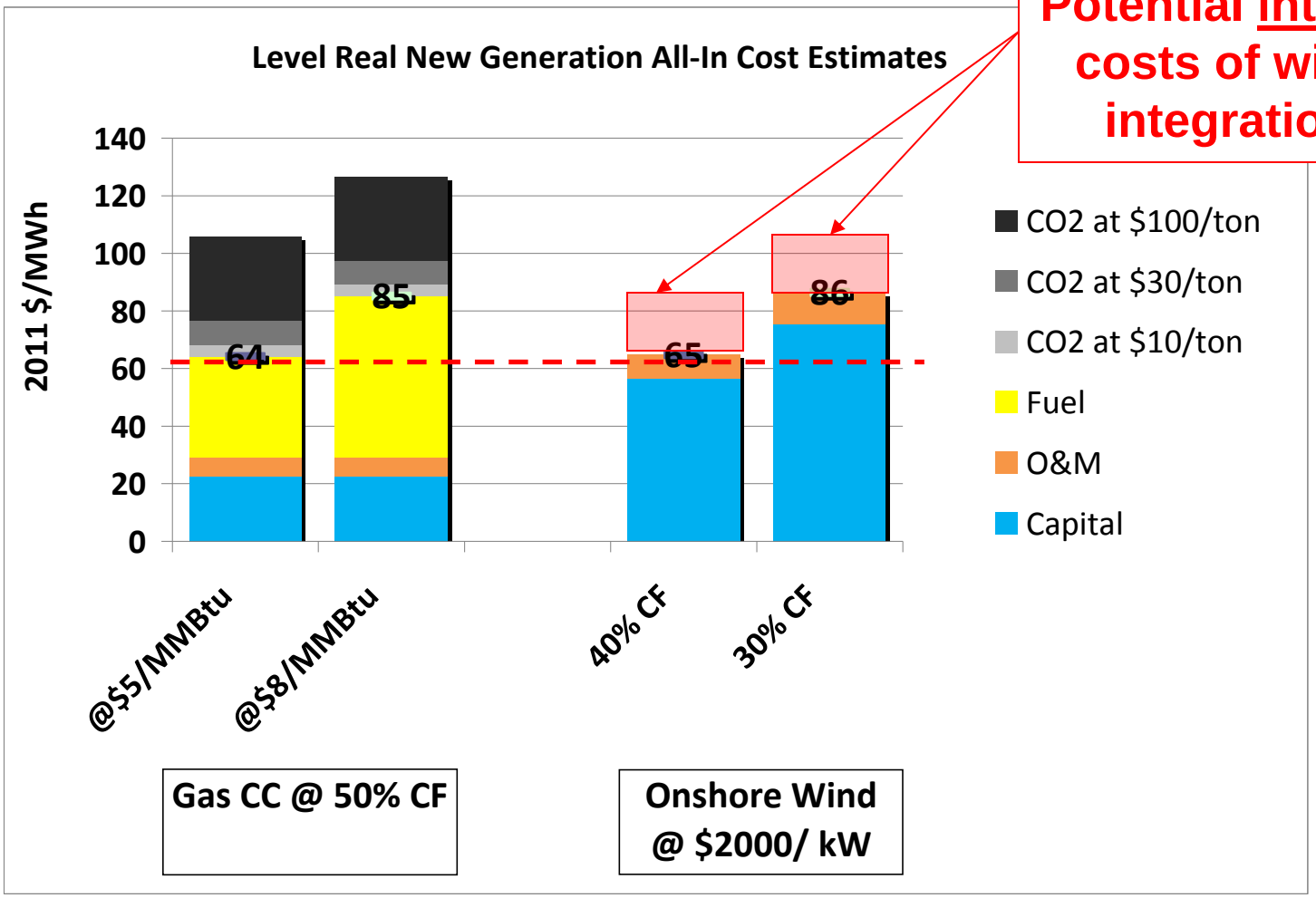
- Various integration studies for CAISO, NYISO, ERCOT, NREL, and SPP have employed distinct methodologies…

  …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"?



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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)

			PTC w. Tax Equity	Delta	MLP Yield
1	**Assumptions**				
2	Capacity Factor	%	40%	0%	40%
3	Revenue Requirement	$/MWh	53	-	53
4	Production Tax Credit	$/MWh	22	(22)	-
5	3rd Party Equity Cost*	%	12%	-4%	8%
6	**Capital Structure**				
7	Debt	$M	60	40	100
8	3rd Party Equity	$M	100	(10)	90
9	Developer Equity	$M	40	(30)	10
10	Total	$M	200	-	200
11	**Cash Flow**				
12	EBITDA	$M	15.7	-	15.7
13	Interest @ 7%	$M	(4.2)	(2.8)	(7.0)
14	3rd Party Equity	$M	(12.0)	5.1	(6.9)
15	PTC	$M	7.7	(7.7)	-
16	Net Cash Flow	$M	7.2	(5.4)	1.8
17	**Developer Pre-Tax Ret.**	%	12%	0%	12%

* Pre-tax

3. MLPs "in lieu of tax credits"?

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

			PTC w. Tax Equity	Delta	MLP Total Return
1	**Assumptions**				
2	Capacity Factor	%	40%	0%	40%
3	Revenue Requirement	$/MWh	53	9	62
4	Production Tax Credit	$/MWh	22	(22)	-
5	3rd Party Equity Cost*	%	12%	-1%	11%
6	**Capital Structure**				
7	Debt	$M	60	40	100
8	3rd Party Equity	$M	100	(10)	90
9	Developer Equity	$M	40	(30)	10
10	Total	$M	200	-	200
11	**Cash Flow**				
12	EBITDA	$M	15.7	3.0	18.7
13	Interest @ 7%	$M	(4.2)	(2.8)	(7.0)
14	3rd Party Equity	$M	(12.0)	2.1	(9.9)
15	PTC	$M	7.7	(7.7)	-
16	Net Cash Flow	$M	7.2	(5.4)	1.8
17	**Developer Pre-Tax Ret.**	%	12%	0%	12%

* Pre-tax