Analyzing YieldCos and Other Financial Engineering

North American Power Credit Organization Credit Conference

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Agenda

1. Overview
2. Importance of Sponsor
3. Basic Corporate Finance Model
4. Analytical Approach
5. Q & A

1 Overview

YieldCo: An Alternative Financing Vehicle

- A corporation designed to pay a high rate of dividends (yield) to shareholders
- A type of financial engineering, which also includes MLPs and REITs
- Brings MLP corporate finance model to power sector
- Unproven finance model, with 2 YieldCos rated, both non-investment grade:

Sponsor	Rating	YieldCo	Rating
NRG Energy	Ba3	NRG Yield	Ba1
SunEdison	Not Rated	TerraForm	Ba3
NextEra	Baa1	NextEra Energy Partners	Not Rated
TransAlta	Baa3/Negative	TransAlta Renewables	Not Rated
Abengoa	B2	Abengoa Yield	Not Rated

Source: Moody's

Similarities and Differences Among Yield Vehicles

» Yield vehicles differ in their treatment under the tax code, which determines eligible assets, but corporate finance strategies are similar

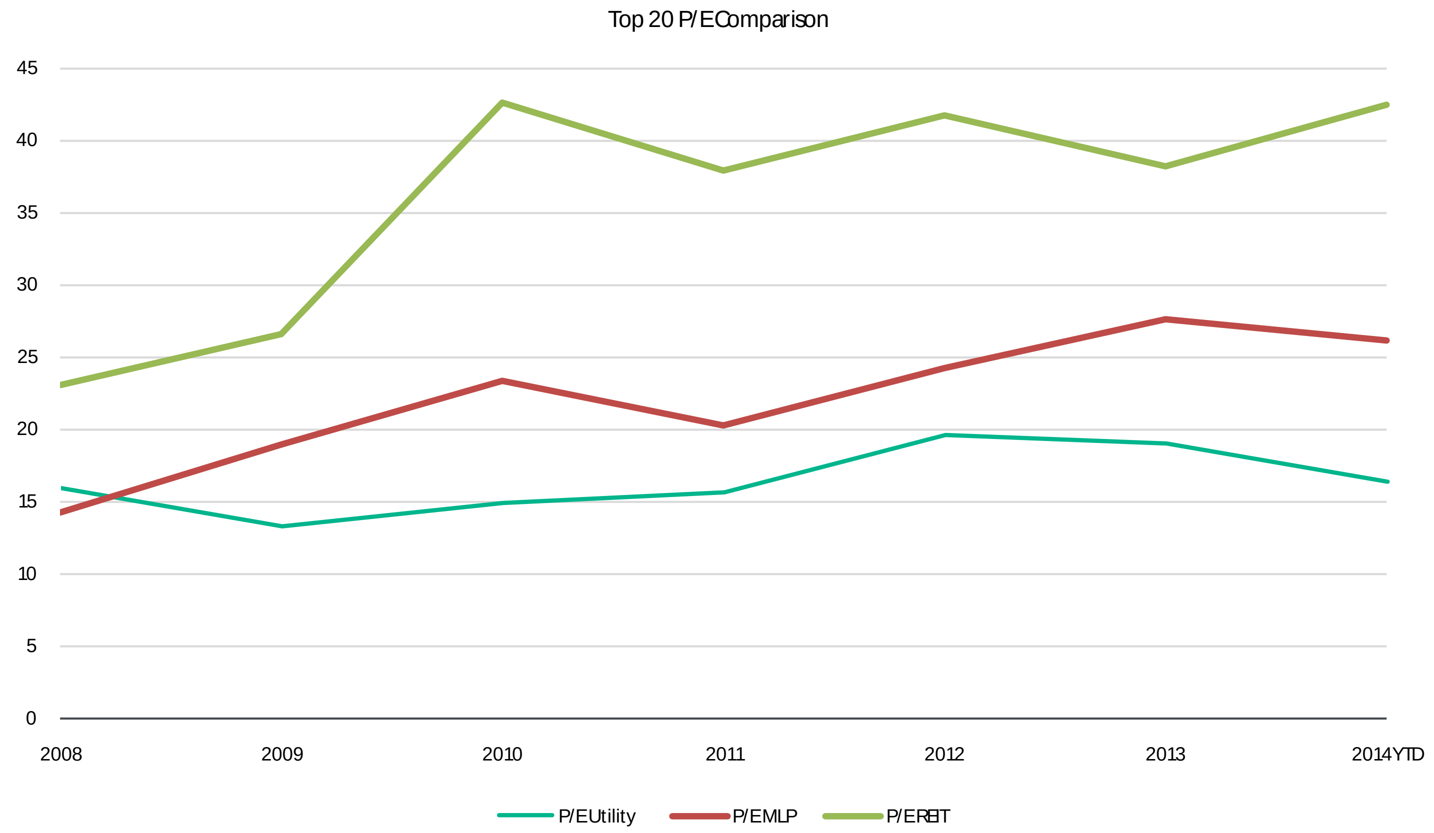
	MLP	YieldCo	REIT
History/ Industry	30 years/ energy	<2 years/ renewables	50 years/ real estate
Corporate structure	Partnership	C-Corp	Corporation, trust, association
Tax status	Not taxable at entity	Taxable, but depreciation from acquired assets shields taxes	Not taxable at entity
Qualifying assets	"Exhaustible" resources that generate "qualified income" per IRS (exclude renewables, utilities)	Unrestricted	"Real property" per IRS (excludes renewable generating equipment considered "personal property")
Dividends	Partnership agreement requires payout of Distributable Cash Flow	Unrestricted	IRS requires payout of 90% of income
Other characteristics	Ongoing businesses; typically unencumbered assets	Assets are contracted revenue streams without organic growth; portfolio of projects with non-recourse amortizing debt	

Why Power Turning Now to Financial Engineering

- Strong growth prospects for renewables
  - Falling costs, EPA's Clean Power Plan carbon reduction beginning 2020,
- Find new funding source to meet construction deadlines to receive tax incentives: PTC by Y-E 2015, reduction in ITC by Y-E 2016
  - Replace tax equity, a traditional form of financing for renewables
- Matches power developers' **need for capital** with investors **demand for yield** in low-interest rate environment
- Raise cheaper equity capital for growing, secondary business

Looking to Drive Cost of Capital Down

What goes up must come down



Upside of Financial Engineering

» Diversify sources of capital to a growing class of yield-oriented investors

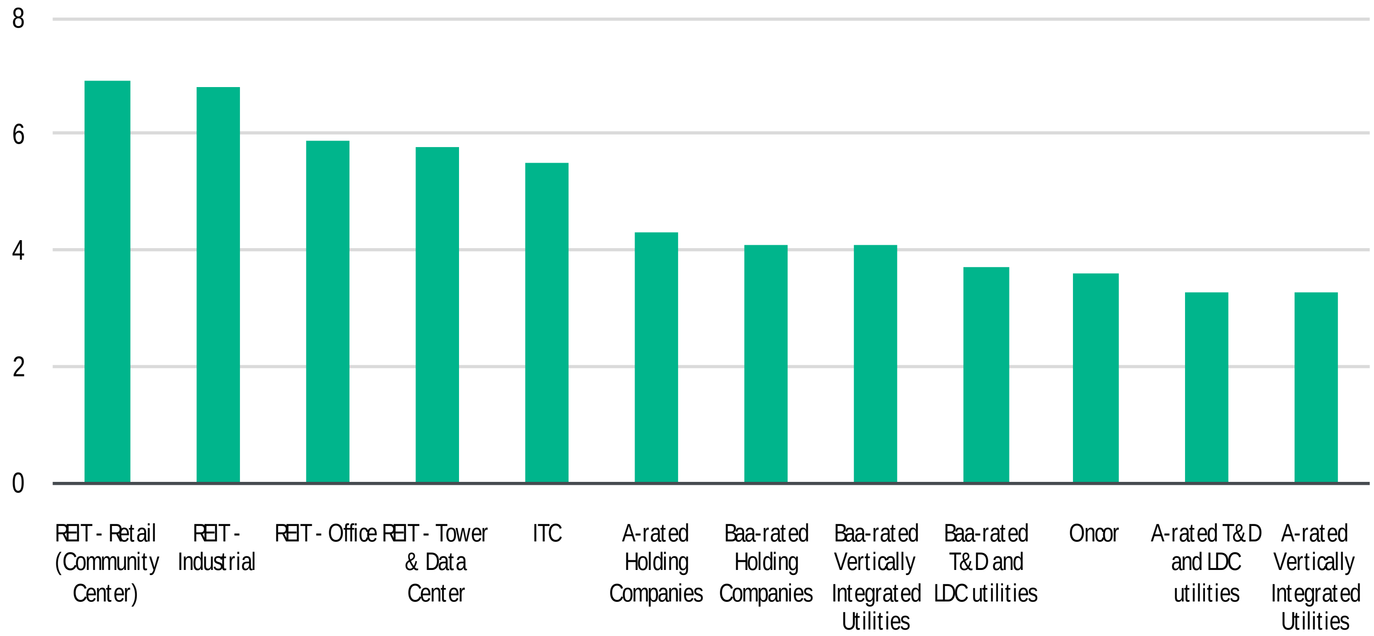
» Boost stock price by bringing transparency to undervalued business
  – Clearly delineate business lines, by growth and return expectations

» Monetize portion of assets while retaining control and potential upside

» Growth delivered by the finance department
  – Shareholder growth amidst anemic sales volume prospects

Unlocking Incremental Debt Capacity

Investment Grade REITs Maintain Higher Debt / EBITDA Than Utilities



Source: Moody's, 2013 data

Risks of Financial Engineering

- Trade-off of near-term benefits at the expense of long-term financial flexibility
- Getting on the treadmill – pressure to keep raising dividends per share
  - PPA-backed assets have finite cash streams, organic growth
  - Mind the distribution coverage: grow cash-producing assets in tandem with distributions
- Feeding the beast – acquisition event risk
  - Reliable long-term forecasting not possible because uncertainty in what might be acquired when
  - Our analysis of YieldCos and their sponsors will evolve as they make acquisitions and change their capital structure, the level of structural subordination, and business risk
- Typically comes with increased leverage across consolidated family
- Structural subordination / complexity
  - Cash leakage
  - May be neutralized by paydown of Sponsor debt or more cash flow from other assets
  - Debt covenants could restrict free flow of capital up/down organization

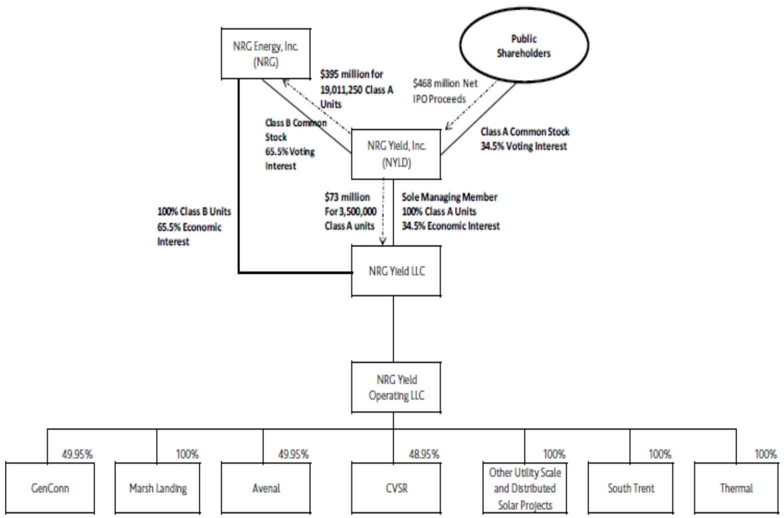
Increased Capital Structure Complexity

Can you follow the cash flows?

YieldCo

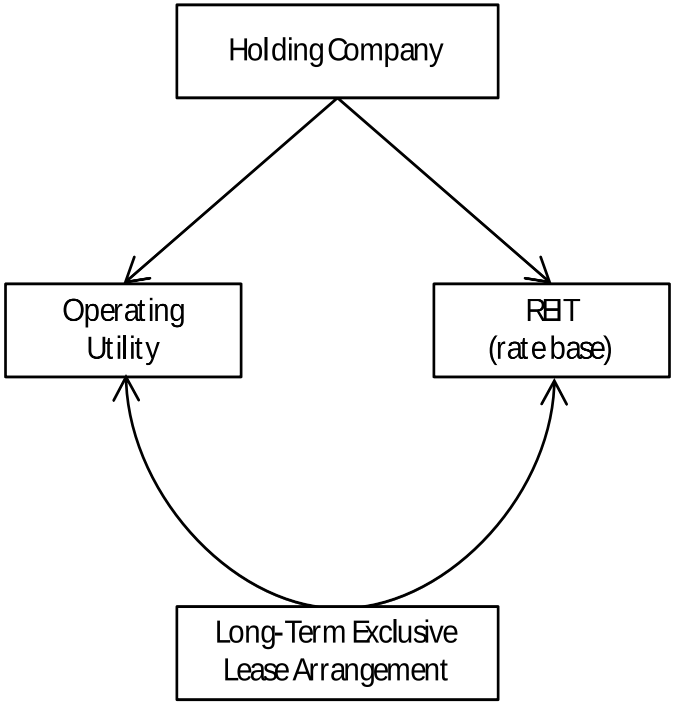
EXHIBIT 1

NRG Yield Inc. Organization Chart



Source: NRG Yield S-1 dated 07/08/2013 and NRG Yield 06/30/2013 10-Q

Illustrative Utility (Transmission) REIT



Source: Moody's

Potential Candidates for Yield Vehicles

- **YieldCos – Mostly unregulated, non-investment grade candidates**
  - Utilities
    - Diverse holdco, but utility is core business. Raise capital for growing secondary business.
    - Example: Sempra
  - Renewable/Infrastructure Developers
    - Long -term players. Lower cost of capital is prime motive.
    - YieldCo adds stable cash flows to the consolidated credit profile. Recycle equity capital.
    - Example: Acciona
  - Solar Panel Manufacturers
    - Many entered project development to capture PPA value vs being limited to commodity market for panels.
    - YieldCo provides balance sheet strength to retain more value – keep project rather than sell before construction.
    - YieldCo maybe more creditworthy than parent.
    - Examples: First Solar, SunPower
  - Aggregators
    - Opportunistic financial investors
- **REITs**
  - Electric transmission owners
    - InfraREIT, Oncor

Long-term Risks to Corporate Finance Model

» Yield Vehicle valuations unlikely to keep rising indefinitely

» Potential constraints:
  – Higher interest rates
  – Taxes – YieldCo eventually uses up tax benefits and starts paying taxes
  – Regulation that slows / stops renewables momentum

» Downside scenario (e.g., Atlantic Power):
  – Assets generate less cash flow
    » Weak power prices, recontracting risk, asset underperformance
  – Dividend cut
  – Stock prices drop, reducing market access to make acquisitions to grow cash flow, refinance debt
  – Liquidity profile weakens due to covenant restrictions

Potential End-Games: Sponsor and Case-Specific

- Sponsor response to Downside Scenario will be case-specific
- Downside Scenario affects stockholders first
- Dividend reductions will be an important tool to manage credit impact
- Strong sponsor could re-absorb the Yield Vehicle (e.g., Kinder Morgan share exchange to restructure as C-corp, Spectra Energy taking private its income fund)
- Renewable developers / panel manufacturers may need to recalibrate business model
  - Cost of capital may go up
  - Projects maybe sold to utilities again rather than retained
- Financial sponsors will stop growth and may slowly wind down their funds, sell assets
- Sponsor can sell the Yield Vehicle
- Some sponsors may position the Yield Vehicle as non-recourse

2 Importance of Sponsor

Sponsor's Impact on Yield Vehicle

- Sponsor creates a Yield Vehicle: provides it with assets, manages it.
- Sponsors of MLPs own a 2% GP equity stake which gives them almost full control of the MLP. MLPs have less corporate governance protections than a typical public company.
  - YieldCos have replicated this corporate governance model, through majority share ownership and/or dual-class voting structure.
- Can raise corporate governance conflicts, if economic interests diverge
- Symbiotic relationship between Yield Vehicle and Sponsor results in close ratings (usually 0-2 notches above/below)
- Sponsor could be positive or negative influence on Yield Vehicle credit quality
  - Sponsor rated higher: Sponsor larger, more mature
  - Yield Vehicle rated higher:
    - Sponsor is simply a holding company for Yield Vehicle as principal subsidiary
    - Yield Vehicle has lower business risk than Sponsor (e.g., NRG Yield, TerraForm)

Yield Vehicle's Impact on Sponsor

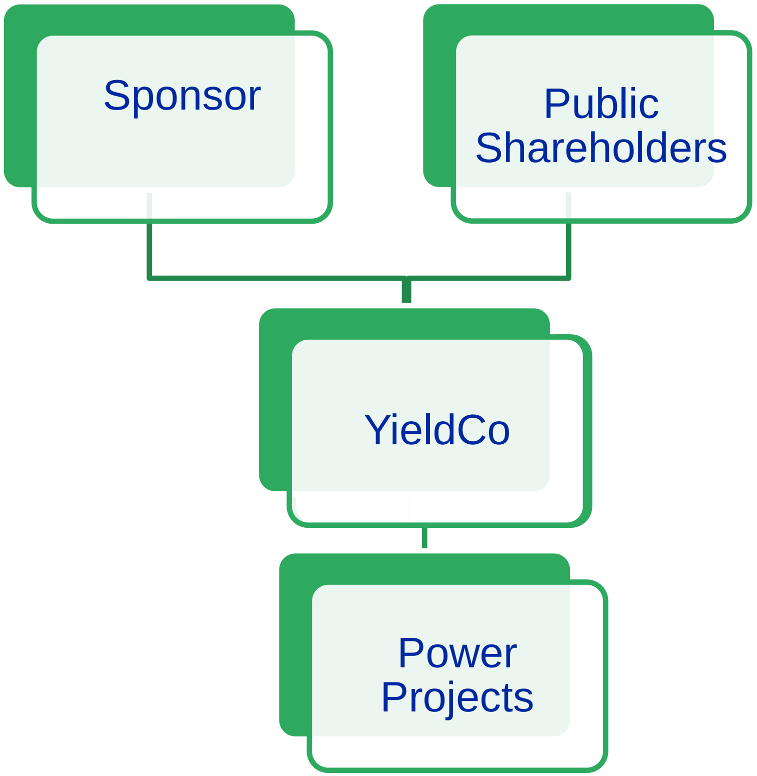
- Focus on cash leakage and structural subordination, but overall impact on Sponsor is case-specific
- NRG / NRG Yield (NYLD)
  - High quality cash flow moved to NYLD, but these are mostly new cash flows after NYLD's formation, so neutral to our assumptions for NRG
  - NYLD necessary for NRG because of lower cost of capital
  - NYLD makes contracted generation a viable business for NRG
  - NYLD allows NRG to grow contracted cash flows, though NRG parent debt holders structurally subordinated
- NextEra / NextEra Energy Partners (NEP)
  - NEP incrementally adds to dividend payout and structural complexity, but too small to have significant impact on NEE
  - NEE has strong access to capital - will not risk its rating over this minor affiliate
  - NEP brings alternative source of equity capital for secondary growing business
  - NEP allows NEE to recycle capital while retaining control and potential upside

3

Basic Corporate Finance Model

Illustrative YieldCo

- Sponsor provides assets, management and employees
- Sponsor can have significant holdco debt, which becomes more structurally subordinated
- NRG and TerraForm have OpCo level in between YieldCo and Power Projects that hold rated debt
- Power projects leveraged with project finance debt, with restrictive covenants
- Projects could be JVs that also be leveraged with project finance debt



Illustrative YieldCo Measures

Measures	Typical	Significance
Dividend Yield	2% - 5% dividend % stock price	Strength of stock price, cost of equity capital
Target Distribution	80% - 85% Cash Available for Distribution	Reverse of 1.2x Distribution Coverage Ratio
Yield Growth Guidance	12% - 15% annual growth for first 3 – 5 years	
Drop-Down Eligible Assets	Rights of First Offer assets for first 3 – 5 years	Future drop-downs; visibility for growth
Incentive Distribution Rights	Yes	Replicates MLP feature
Asset Contract Life	20 years	
Debt / EBITDA	6x – 7x	

Source: Moody's

Yield

- Lower cost of capital for investments
  - High stock market demand for Yield Vehicles lowers cost of raising equity vs. Sponsors
  - Low yield = high stock price
    - fewer shares that need to be issued, dividends need to be paid on fewer shares
  - C-Corps pay taxes which raises hurdle rate for new investments vs. Yield Vehicles that don't pay taxes
- Illustrative example of cost of capital arbitrage

	Yield Vehicle	**Sponsor**
Debt	3%	3%
Equity	5%	8%
Weighted Avg Cost of Capital	8%	11%

Drop-downs

- Sponsor sells, or “drops-down,” additional assets to its Yield Vehicle
- ROFO assets (“pipeline” of potential drop-downs) could benefit Yield Vehicle stock price
- Virtuous circle that could benefit both Yield Vehicle and Sponsor (illustrative)

Sponsor

Sells assets but maintains control

Receives cash proceeds

Yield Vehicle

New assets increase cash flow

Increases distributions

Share price increases

Receives more distributions (IDRs)

Share price increases

Raise capital for new assets

Incentive Distribution Rights (IDRs)

Incentive for Sponsor to create Yield Vehicle

» Replicates MLPs: GP initially retains 2% GP stake, but has opportunity to get 50% of distribution increases through IDR mechanism

Tiered structure – tops out at 50% “high splits”

» Illustrative example: 100 units at $2/dpu

	Distributions per LP unit	LP%	GP%	Distributions to LP	Distributions to GP	Total Distributions
First Target	up to $1.00	98%	2%	$ 100.00	$ 2.04	$ 102.04
Second Target	above $1.00 up to $1.20	85%	15%	20.00	3.53	23.53
Third Target	above $1.20 up to $1.50	75%	25%	30.00	10.00	40.00
"High Splits"	above $1.50	50%	50%	50.00	50.00	100.00
				$ 200.00	$ 65.57	$ 265.57
				75%	25%	100%

Cash Available For Distributions (CAFD)

- Equity-oriented calculation to measure dividend growth, the driver of stock price
  - EBITDA: non-GAAP accrual accounting metric, not indicative of liquidity
  - "Maintenance capex" determined by management
  - Rely on external financing for "growth capex"

YieldCo Math
EBITDA
-/+ Adjustments affiliate income/distributions
- Interest
- Principal
- Maintenance Cpx
= CAFD
- Growth Cpx
+ Debt financing
+ Equity financing

Exercise – Applying the YieldCo Math

» Calculate CAFD and Dividend based on the below financial statements

– Maintenance capex is $30

– YieldCo finances with 50/50 debt/equity

– Payout is 85% of CAFD

Income Statement		**EBITDA**	____________
Op Inc	1230	-/+ Affiliate adjs	____________
Depreciation	-300	- Interest	____________
Interest	-100	- Principal	____________
Net Inc	830	- Maintenance capex	____________
		= CAFD	____________
CF Statement		- Dividend	____________
Net Inc	830	- Growth capex	____________
Depreciation	300	= Financing Need	____________
Affiliate inc	-30	+ Debt financing	____________
Affiliate distrib	30	+ Equity financing	____________
CF from Ops	1130		
Capex	-1180		
Principal	-100		

Exercise – Applying the YieldCo Math

» Calculate CAFD and Dividend based on the below financial statements
  - Maintenance capex is $30
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Income Statement	
Op Inc	1230
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CF Statement	
Net Inc	830
Depreciation	300
Affiliate inc	-30
Affiliate distrib	30
CF from Ops	1130
Capex	-1180
Principal	-100

EBITDA	1230
-/+ Affiliate adjs	0
- Interest	-100
- Principal	-100
- Maintenance capex	-30
= CAFD	1000
- Dividend	-850
- Growth capex	-1150
= Financing Need	-1000
+ Debt financing	-500
+ Equity financing	-500

4 Analytical Approach

Analytical Approach – YieldCos

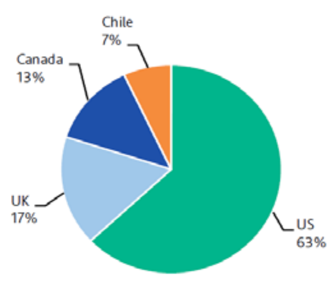
- Basic credit analysis applies but also consider risks arising from corporate finance model
- Apply Moody's rating methodology for Unregulated Power Companies

Factors	Sub-Factor	% weight	Measures	Typical Positioning
SCALE	Scale ($ in total assets)	10%	diversification	YieldCos still relatively small
BUSINESS PROFILE	Market Diversification	5%	geographic or market region diversification	rated YieldCos have some concentration but are reasonably diverse
	Hedging and Integration Impact on Cash Flow Predictability	10%	cash flow visibility due to contractual arrangements or hedges	long life of contract, good diversity and credit quality of counterparties
	Market Framework and Positioning	15%	stability of markets and degree of fuel concentration risk	most assets in established markets
	Capital Requirements and Operational Performance	5%	capex needed for maintenance and environmental	mostly renewable assets with limited capex, low business risk; operational record of Sponsor considered
FINANCIAL POLICY	Financial Policy	15%	conservatism in financial policy	weak due to high payouts; consider Sponsor's record in balancing shareholder and creditor interests
LEVERAGE AND COVERAGE	(CFO Pre-W/C + Interest) / Interest	10%	ability to meet interest with internally generated cash flow	leveraged profile
	(CFO Pre-W/C) / Debt	20%	cash flow generating ability vs. debt load	leveraged profile
	RCF / Debt	10%	dividend policy	leveraged profile

Analytical Approach – YieldCos

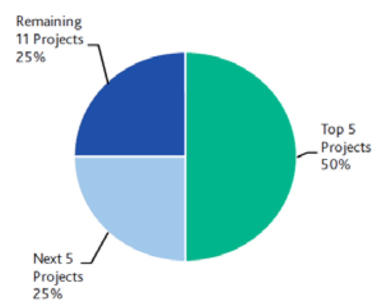
» Asset diversity, business risk differentiate business profiles

2015E CAFD by Geography

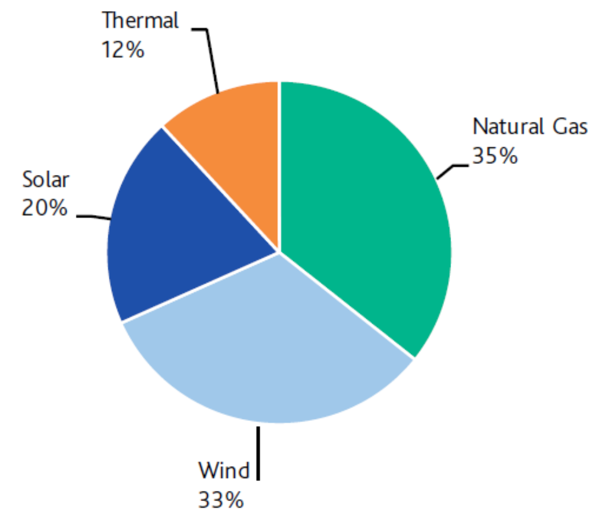


Source: Moody's, TerraForm Power Inc

2015E CAFD by Project Concentration

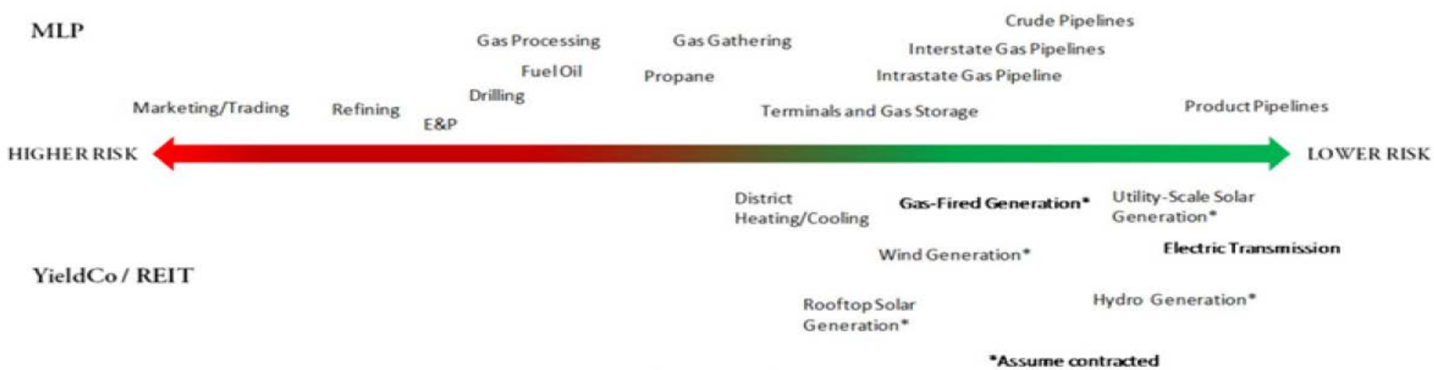


Source: Moody's, TerraForm Power Inc



2015E NYLD CAFD by Technology; Source: Moody's

Business Risk Spectrum



Source: Moody's

Analytical Approach – utility REIT

- Likely to apply rating methodology for Regulated Utilities or Regulated Networks
- Credit considerations, in order of importance: impact on regulatory relationships, impact on retained cash flow, complexity of capital structure
- Regulatory relationships
  - Regulators may question taxes currently included in rates, since REIT doesn’t pay taxes
  - Regulators may question cost of capital, allowed returns, cost allocations, affiliate transactions
  - Utility’s lease payment to REIT will be the utility’s debt
  - Regulators may treat utility and REIT together for rate-making purposes
- Retained cash flow
  - Dividends become non-discretionary (required payout of 90% of income)

Summary

» Basic credit analysis applies but also consider risks arising from corporate financial model

» Attractive industry environment but unproven business model

» Credit quality differentiated by sponsor and by asset diversity, business risk

» Sponsor could be positive or negative to YieldCo credit quality

  – Impact on Sponsor: focus on cash leakage, structural subordination

  – Impact on YieldCo: focus on potential drop-downs, track record in operations and financing

» Potential reduction in long-term financial flexibility: higher payouts, increased leverage across consolidated family

Q & A

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