

TerraForm Power, Inc.

Flexing YieldCo Muscles: Interactive TERP Model

Launching our TERP interactive model to allow fine tuning of assumptions

In our recent [initiation](#) we presented that TerraForm Power offers the most attractive risk/reward profile out of the YieldCos we cover and today we present our first [interactive model](#) behind our \$38 Price Target. The model facilitates adjusting operating metrics such as CAFD/watt and the magnitude of projects as well as valuation characteristics including the yield assumption. The most sensitive drivers include TERP's success on converting leads and qualified leads into operational projects. We conservatively do not ascribe any valuation in our base case to these classifications; however, executing at the historical averages of 10% and 40%, respectively, is worth \$7/sh of upside vs our Price Target alone.

Busy two days for TERP with Atlantic Power acquisition and SUNE drop down

On Wednesday TERP announced the acquisition of Atlantic Power's wind assets for \$625Mn (\$600-\$700Mn UBSe valuation) in another accretive deal for the YieldCo with a ~9% net equity yield. If the First Wind deal had not cemented TERP as a top tier YieldCo in investors' minds, this latest win should do so. Using our mini-model with an 11x drop-down multiple and \$38 equity issuance price we estimate ~\$1-2/sh of accretion. Earlier this week SUNE announced 168Mn of drop-downs which we estimate had an ~8.5% net equity yield as the pair continue to execute. We suspect the next round of dealmaking may well involve strategic partnerships on future drops.

Interactive model allows you to embed M&A upside

Following our [Power Developers Mini-Conference last week](#), we see private renewable developers as positioning themselves to form partnerships with the leading YieldCos. While the largest deals are likely still a few years out, the best managed YieldCos will proactively sign-up developers with ROFO agreements (upfront cash today for exclusive negotiation rights as MWs achieve COD) or pursue outright acquisitions. Our interactive model allows clients to embed third-party M&A (base case assumes no contribution).

Valuation: Buy and \$38 PT – preferred YieldCo vehicle

Valuation is based on applying a 6% yield to 2018E dividend per share (DPS).

Equities

Americas
Electric Utilities

12-month rating **Buy**
12m price target **US\$38.00**
Price **US\$38.23**
RIC: TERP.O **BGG:** TERP.US

Trading data and key metrics

52-wk range	US\$38.23-0.00
Market cap.	US\$2.07bn
Shares o/s	54.2m (COM)
Free float	87%
Avg. daily volume ('000)	529
Avg. daily value (m)	US\$18.2
Common s/h equity (12/15E)	US\$0.67bn
P/BV (12/15E)	3.4x
Net debt / EBITDA (12/15E)	6.4x

EPS (UBS, diluted) (US\$)

	12/15E	
	UBS	Cons.
Q1E	(0.13)	(0.01)
Q2E	0.03	0.10
Q3E	0.09	0.10
Q4E	0.22	0.09
12/15E	0.23	0.27
12/16E	1.05	0.84
12/17E	0.76	0.69

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Highlights (US\$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Revenues	16	17	126	486	687	882	1,476	1,935
EBIT (UBS)	5	5	7	189	300	397	706	930
Net earnings (UBS)	1	0	(73)	14	79	129	263	368
EPS (UBS, diluted) (US\$)	0.03	(0.01)	(1.44)	0.23	1.05	0.76	1.14	1.34
DPS (US\$)	0.00	0.00	0.27	1.30	1.53	1.90	2.28	2.61
Net (debt) / cash	(106)	(436)	(1,130)	(2,324)	(3,295)	(4,166)	(7,007)	(9,124)
Profitability/valuation	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
EBIT margin %	33.8	29.3	5.7	38.8	43.7	45.0	47.8	48.1
ROIC (EBIT) %	-	1.8	0.5	5.5	6.2	6.6	8.4	8.1
EV/EBITDA (core) x	-	-	-	13.8	11.4	10.3	7.7	5.9
P/E (UBS, diluted) x	-	-	-	NM	36.5	50.6	33.5	28.6
Equity FCF (UBS) yield %	-	-	-	(75.1)	(58.3)	(43.7)	(167.1)	(99.9)
Net dividend yield %	-	-	-	3.4	4.0	5.0	6.0	6.8

Source: Company accounts, Thomson Reuters, UBS estimates. UBS adjusted EPS is stated before goodwill-related charges and other adjustments for abnormal and economic items at the analysts' judgement. Valuations: based on an average share price that year, (E): based on a share price of US\$38.23 on 01 Apr 2015 19:39 EDT

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This report has been prepared by UBS Securities LLC. **ANALYST CERTIFICATION AND REQUIRED DISCLOSURES BEGIN ON PAGE 15.** UBS does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Investment Thesis

TerraForm Power, Inc.

Investment case

TerraForm Power (TERP) is SunEdison's (SUNE) dividend growth-oriented vehicle which the sponsor intends to drop its contracted solar and wind assets into. TERP focuses on assets in the US, EMEA, and Latin America. Additionally, TERP is active in third-party M&A and has completed three deals since the July 2014 IPO, most notably 521MW from First Wind. As of the First Wind deal, SunEdison and First Wind had visibility into 10.7GW of conversion-weighted renewable assets with 4.5GW in its pipeline and backlog.

Upside scenario

Our upside scenario is premised on SunEdison and First Wind's successful development efforts which facilitate a strong pipeline of assets for TerraForm. If management executes on its currently identified pipeline and backlog and is able to trade at a 5% yield, we see upside to \$45. In a scenario with value ascribed to leads and qualified leads, shares could be worth ~\$51 at a 5% yield.

Downside scenario

We see downside to shares if the sponsor is not able to develop assets consistently in the future. In such a scenario the yield could widen 200bp, thus reducing value to \$25 due to the discounted yield and lower CAFD.

Upcoming catalysts

2H15	Financial update on Just Energy Solar
Mid-2015	Launch of SUNE EM YieldCo
2015	Next SunEdison Drop Downs
2015	Updates on US/Chinese trade disputes

12-month rating

Buy

12m price target

US\$38.00

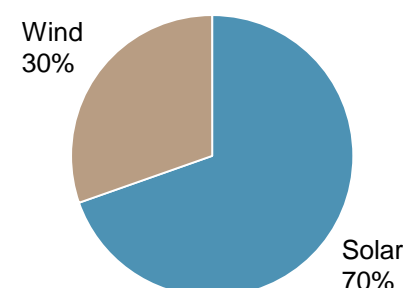
Business description

TerraForm Power (TERP) is a dividend growth-oriented company (YieldCo) formed to own and operate contracted clean power generation assets acquired from SunEdison and unaffiliated third parties. The business objective is to acquire high-quality contracted cash flows, primarily from owning solar generation assets serving utility, commercial, and residential customers. The November 2014 acquisition of FirstWind adds primarily wind assets in the Northeast US and Hawaii. FirstWind also adds expertise in wind and a development pipeline. The visible drop-down pipeline is 70% solar and 30% wind.

Industry outlook

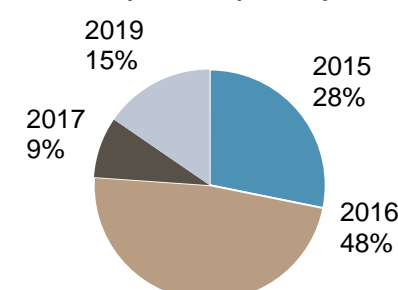
The electric utility industry is projected to experience weak or negative electric demand growth in coming years as a tepid economy and energy efficiency dampen demand. In the unregulated merchant power space, we see limited potential for a meaningful recovery from currently low power prices due to limited projected demand growth, growth of subsidized renewables, and potential for only modest further retirements. At regulated utilities, we believe rising interest rates and robust valuations are a challenge to the sector, particularly as earnings growth stalls once EPA-mandated growth CapEx slow mid-decade. We expect cost-cutting and strategic planning to be a key theme across both regulated and competitive companies, with M&A at modest (at best) premiums designed to extract cost synergies.

Visible Drop Down Pipeline by Technology Type (%)



Source: Company Filings

Visible Drop Down Pipeline by COD (%)



Source: Company Filings and UBS Estimates

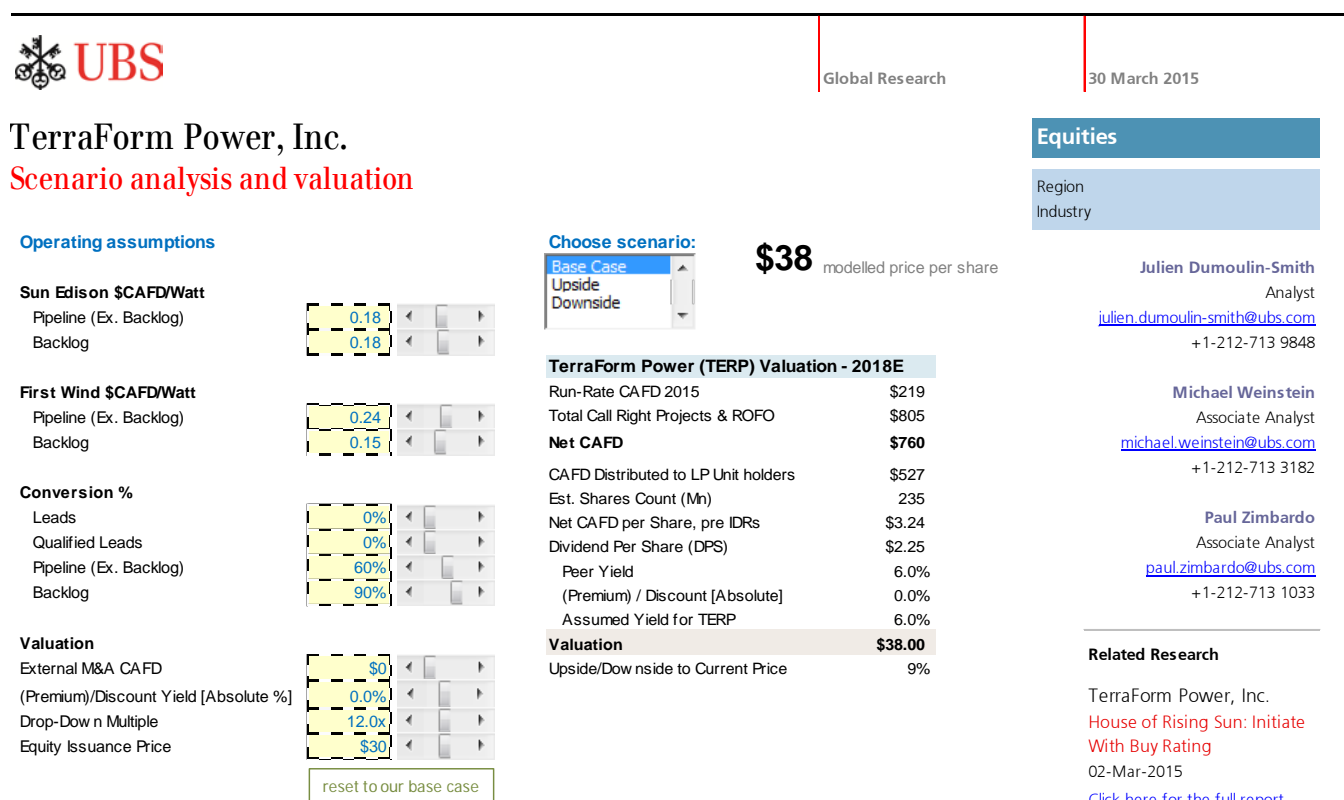
Please note that the interactive model makes simplifying calculations and adjustments for ease of use. Please reference the related research for details on the model's assumptions. Please refer to reports below for additional background:

[3/2/15 House of Rising Sun: Initiate With Buy Rating](#)

[3/6/15 Beantown Buzz: TERP and SUNE Management Takeaways](#)

[Please click here to access our interactive TerraForm Power \(TERP\) Model.](#)

Figure 1: Cover Page of our Interactive TerraForm Power Model



Source for all figures: Company Filings, FactSet, SNL Energy, and UBS Energy

This interactive model was developed in conjunction with the published report listed above and makes simplifying assumptions for ease of use; please reference the report for details on the model's assumptions. The model provides graphical scenario outputs based on changes the user can make to certain inputs. These outputs are hypothetical and do not reflect the research analyst's views, forecasts or valuations. The model is not updated after being first published and therefore may not be current.

This material has been prepared by UBS Securities LLC

Source: Company Filings, FactSet, SNL Energy, and UBS Estimates

Drilling into the scenarios: All about MWs

The scenarios in our simplified interactive model relate to how successful SunEdison is in developing preliminary opportunities into functioning renewable projects and ultimately dropping them into their YieldCo TerraForm Power (TERP). Below we present the assumptions in our base, downside, and upside cases as well as a breakdown of the isolation sensitivities in our base case. We invite investors to adjust the sliders in the interactive model to fine-tune their expectations and conduct scenario analyses.

Most important assumptions in our model relate to development conversion %.

Figure 2: TerraForm Power Modeling Scenarios

TerraForm Power	Scenarios			Base
Modeling Assumptions	Downside	Base	Upside	Sensitivities
Sun Edison \$CAFD/Watt				
Pipeline (Ex. Backlog)	0.18	0.18	0.18	5bp ≈ \$1/sh
Backlog	0.18	0.18	0.18	5bp ≈ \$1/sh
First Wind \$CAFD/Watt				
Pipeline (Ex. Backlog)	0.24	0.24	0.24	NM
Backlog	0.15	0.15	0.15	10bp ≈ \$1/sh
Development Conversion %				
Leads	0%	0%	5%	5% ≈ \$2/sh
Qualified Leads	0%	0%	20%	10% ≈ \$1/sh
Pipeline (Ex. Backlog)	0%	60%	60%	10% ≈ \$1/sh
Backlog	90%	90%	90%	10% ≈ \$1/sh
Valuation				
External M&A CAFD	\$0	\$0	\$0	\$100Mn ≈ \$1/sh
(Premium)/Discount Yield [Absolute %]	2.0%	0.0%	-1.0%	50bp ≈ \$3/sh
Drop-Down Multiple	12.0x	12.0x	12.0x	1x ≈ \$3/sh
Equity Issuance Price	\$30	\$30	\$30	\$5 ≈ \$3/sh

Source: Company Filings, FactSet, SNL Energy, and UBS Energy

Base Valuation Scenario: \$38 per Share

Our base valuation as presented in our initiation arrives at a \$38 Price Target and Buy Rating while utilizing relatively conservative assumptions. Notably we do not ascribe value the early stage developmental opportunities classified as leads and qualified leads, classes that management has historically converted at 10% and 40%, respectively.

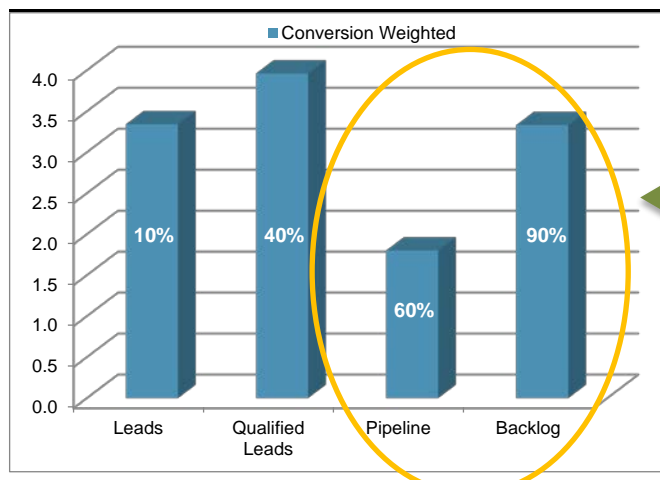
Figure 3: TERP Base Valuation Scenario

TerraForm Power (TERP) Valuation - 2018E		Scenario
Run-Rate CAFD 2015		\$219
Sponsor Drop Down		
Leads [0%] Prob.		\$0
Qualified Leads [0%] Prob.		\$0
Pipeline [60%] Prob.		\$292
Backlog [90%] Prob.		\$513
Just Energy Pipeline & Other ROFOs		\$0
Total Call Right Projects & ROFO		\$805
Net CAFD		\$760
CAFD Distributed to LP Unit holders		\$527
Est. Shares Count (Mn)		235
Net CAFD per Share, pre IDRs		\$3.24
Dividend Per Share (DPS)		\$2.25
Peer Yield		6.0%
(Premium) / Discount [Absolute]		0.0%
Assumed Yield for TERP		6.0%
Valuation		\$38.00
Upside/Downside to Current Price		9%

Source: Company Filings, FactSet, SNL Energy, and UBS Energy

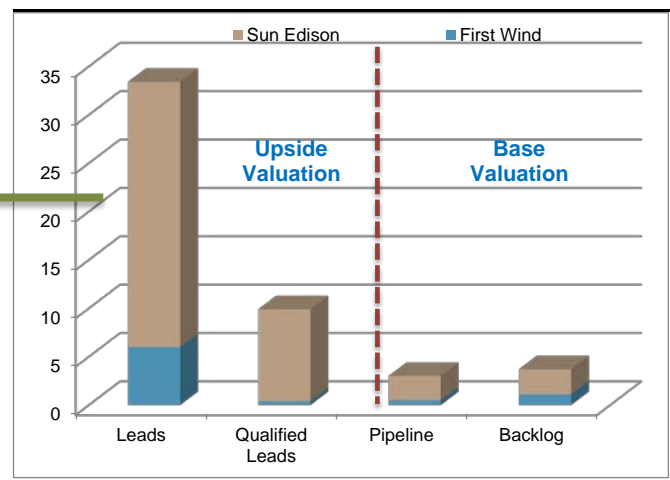
The primary operational difference between our scenario is depicted in the Figures below where we segregate the leads and qualified leads into our upside scenario.

Figure 4: Conversion Weighted MW: SUNE and First Wind as of First Wind deal



Source: Company Filings

Figure 5: Gross MW: SUNE and First Wind Conversion as of First Wind deal



Source: Company Filings

Upside Valuation Scenario: \$51 per Share

As we detailed previously, including value for the leads and qualified leads as well as reducing the yield assumption are the primary drivers in our Upside Scenario.

Our upside scenario still incorporates elements of conservatism.

Where is this scenario still conservative?

- **Leads and qualified leads are at 50% of historical rates:** Increasing these two assumptions to the historical levels (10% for leads and 40% for qualified leads) drives \$7/sh of additional value.
- **Share issuance price assumed at discount to current level:** We assume a constant \$30/sh equity issuance price in all three of our scenarios for simplicity but utilizing the current trading level of ~\$35 drives ~\$3/sh of upside.
- **Yield compression:** TERP is currently trading at 5.5%/6.3% 2017E/2018E yield on UBSe versus NYLD at 4.9%/5.7% 2017E/2018E. The spread has tightened between the two following NRG Yield's underperformance but we still see latitude for further compression.
- **No M&A:** Neither our base nor our upside valuation embedded any M&A upside. Details of the Atlantic Power wind transaction are provided subsequently.
- **No Partnership deals:** Among the key next developments in the TERP strategy is an expectation to acquire not just further third-party acquisitions, but enter into strategic partnerships which should enable improved long-term drop down visibility.

Figure 6: TERP Upside Valuation Scenario

TerraForm Power (TERP) Valuation - 2018E		Scenario
Run-Rate CAFD 2015		\$219
Sponsor Drop Down		
Leads [5%] Prob.		\$222
Qualified Leads [20%] Prob.		\$252
Pipeline [60%] Prob.		\$292
Backlog [90%] Prob.		\$513
Just Energy Pipeline & Other ROFOs		\$0
Total Call Right Projects & ROFO		\$1,279
Net CAFD		\$1,112
CAFD Distributed to LP Unit holders		\$772
Est. Shares Count (Mn)		307
Net CAFD per Share, pre IDRs		\$3.62
Dividend Per Share (DPS)		\$2.52
Peer Yield		6.0%
(Premium) / Discount [Absolute]		-1.0%
Assumed Yield for TERP		5.0%
Valuation		\$51.00
Upside/Downside to Current Price		46%

Source: Company Filings, FactSet, SNL Energy, and UBS Energy

Downside Valuation Scenario: \$25 per Share

Our downside case takes a very punitive approach where we assume that SunEdison will only be able to complete its backlog of projects.

Figure 7: TERP Downside Valuation Scenario

TerraForm Power (TERP) Valuation - 2018E		Scenario
Run-Rate CAFD 2015		\$219
Sponsor Drop Down		
Leads [0%] Prob.		\$0
Qualified Leads [0%] Prob.		\$0
Pipeline [0%] Prob.		\$0
Backlog [90%] Prob.		\$513
Just Energy Pipeline & Other ROFOs		\$0
Total Call Right Projects & ROFO		\$513
Net CAFD		\$543
CAFD Distributed to LP Unit holders		\$377
Est. Shares Count (Mn)		190
Net CAFD per Share, pre IDRs		\$2.85
Dividend Per Share (DPS)		\$1.98
Peer Yield		6.0%
(Premium) / Discount [Absolute]		2.0%
Assumed Yield for TERP		8.0%
Valuation		\$25.00
Upside/Downside to Current Price		-28%

Source: Company Filings, FactSet, SNL Energy, and UBS Energy

YieldCos have been a bright spot in utilities universe

Despite the XLU utilities ETF declining 7% in the first quarter of 2015, the YieldCos we track are up nearly 19% in the first quarter and TERP has lagged behind slightly. We see this as more driven by a series of positive catalysts for peers such as HASI (increased growth rate guidance) and NEP (favorable Analyst Day).

Figure 8: YieldCo Five-Day and YTD Returns: TERP Lags Peers

YIELDCOs	Ticker	5 Day Return	YTD Return	RSI (14Day)
Abengoa Yield PLC	ABY	-0.4%	24.0%	56.5
Hannon Armstrong Sustainable Infracore	HASI	-2.1%	30.2%	63.7
Pattern Energy Group A	PEGI	-0.6%	14.7%	67.2
Transtia Renewables	RNW-CA	-2.8%	10.4%	45.2
TerraForm Power	TERP	2.4%	16.3%	62.4
NextEra Energy Partners, LP	NEP	-0.3%	28.4%	74.3
NRG Yield Inc.	NYLD	-1.5%	6.0%	42.5
Average		-0.8%	18.6%	58.9

Source: FactSet

NRG Yield has been the clear laggard following the California ALJ recommendation not to approve NRG Energy's proposed 600MW Carlsbad peaking plant to replace its retiring Encina plant in Nov 2017. NRG recently offered this asset formally as a ROFO to NYLD. While the ALJ cited that the projected 'need' for the plant was formally through the 2022 period (500-800MWs), it was early to decide on this project without evaluating other 'preferred' (read: renewable) resource alternatives to meet the projected local needs through that period. While the RFO requires a min of 200MW of 'preferred' resources, the ALJ suggests it is premature to simply procure to the minimum level without allowing for a formal RFO process; NRG and SDG&E had negotiated the deal for Carlsbad bilaterally without pursuing wider RFO heading into the latest filing. While the

plant can (and likely will) still petition again under a wider RFO, we see a clear threat the plant could be reduced (from the 6 x 100MW LMS peakers involved) should there be additional preferred resources found. We see this as disproportionately negative to NYLD rather than NRG, highlighting concern around a decelerating drop-down opportunity set in ~2017/2018.

TERP Wins Atlantic Power Wind Portfolio

TERP acquired 521MW of Oklahoma and Idaho wind assets from Atlantic Power (ATP) for \$350Mn equity with \$275Mn of project debt, \$165Mn of which TERP intends to paydown. We estimate an EV / EBITDA of ~11x, above the ~9x on the First Wind deal but roughly in-line with NRG Yield's Alta Wind transaction. The deal appears to offer a similar level of accretion as seen in the 1Q15 SUNE drop-down discussed subsequently. We again conservatively assumed only a 3x Debt / CAFD on the deal but management appears to have latitude to layer in more HoldCo debt given the profile. SUNE is going to maintain the asset in its warehouse facility to manage the dividend profile until it decides to drop the assets into the TERP structure.

As a reminder, every ~\$80-100Mn of CAFD acquired in our interactive model is worth ~\$1-2/sh of equity value premised on our base case assumptions (12x multiple and \$30 repurchase price).

To assess the stock reaction in TERP to the Atlantic Power deal one can tune the mini-model for:

1. 11x Drop-Down Multiple
2. \$37 Equity Issuance Price

Adding \$40Mn External M&A CAFD drives \$1-2/sh upside from this relined base.

Figure 9: TERP-SUNE Atlantic Power Wind Acquisition

TERP-Atlantic Power Deal (\$Mn)	Transaction Capital Structure	\$Mn
625 Purchase Price	Total EV	625
383 Equity	Equity	350
132 Debt	Project Debt Retained	110
110 Debt Assumed	Project Debt To Refinance	165
625 EV	Corporate Debt	132
57 EBITDA (UBSe)	Equity	33
11.0x EV / EBITDA	Total Equity	383
44 Gross CAFD (Guidance)	Total Debt	242
-5 Less: Interest Expense	Total EV	625
39 Post-Financing CAFD		
6 Less: Distribution Reserve		
33 True' CAFD		
4.2x Effective Debt/EBITDA		
3.0x Debt / Gross CAFD		
Guidance: 3-4x Debt / CAFD		
7.0% Gross EV Yield		
5.3% Net EV Yield		
11.5% Gross Equity Yield		
8.7% Net Equity Yield		

ATP Deal	UBSe	Actual
Deal Size	\$600-\$700Mn	\$625Mn
Base Equity	\$375Mn	\$350Mn
EBITDA	\$60Mn	\$57Mn (UBSe)
EV/EBITDA	10-11x	~11x

Source: Company Filings and UBS Estimates

We met with Atlantic Power last November where management stated it expected to divest assets as part of its new strategic plans following its 70% dividend cut and the wind assets were held as a prime example. Our initial estimate at the time was a \$600-700M transaction in 1H15 (about a 10-11x EV/EBITDA multiple off \$60 Mn EBITDA) with the straight equity component at \$375Mn.

Further details on Atlantic Power are available in our latest note [\[here\]](#).

We had thought NYLD and NEP were likely acquirers but TERP has continued to exert its weight in the YieldCo space and was able to wind another large wind portfolio.

Figure 10: Atlantic Power Fleet, Net MW and Adjusted Projected 2014 EBITDA

Legacy Atlantic Power Transmission & AP Generation							
Project	Location	Type	Economic Interest	Net MW	Adj EBITDA % of (midpoint Project guidance)	Adj \$285M-\$300M	Contract Exp
Canadian Hills	Oklahoma	Wind	99%	295	9%	\$ 26	Dec-32
Meadow Creek	Idaho	Wind	100%	120	6%	\$ 18	Dec-32
Chambers	New Jersey	Coal	40%	105	6%	\$ 18	Dec-24
Orlando	Florida	Nat. Gas	50%	65	5%	\$ 15	Dec-23
Selkirk	New York	Nat. Gas	19%	64	5%	\$ 15	Merchant
Piedmont	Georgia	Biomass	100%	53	2%	\$ 6	Dec-32
Idaho Wind	Idaho	Wind	28%	49			Dec-30
Cadillac	Michigan	Biomass	100%	40	2%	\$ 6	Dec-28
Rockland Wind	Idaho	Wind	50%	40	4%	\$ 12	Dec-36
Goshen North	Idaho	Wind	13%	16			Nov-30
Koma Kulshan	Washington	Hydro	50%	6			Dec-37

Atlantic Power Limited Partnership (APLP)							
Project	Location	Type	Economic Interest	Net MW	Adj EBITDA % of (midpoint Project guidance)	Adj \$285M-\$300M	Contract Exp
Manchief	Colorado	Nat. Gas	100%	300	5%	\$ 15	Oct-22
Morris	Illinois	Nat. Gas	100%	177	4%	\$ 12	Nov-23
Frederickson	Washington	Nat. Gas	50%	125	4%	\$ 12	Aug-22
Williams Lake	B.C.	Biomass	100%	66	6%	\$ 18	Mar-18
Curtis Palmer	New York	Hydro	100%	60			Dec-27
Mamquam	B.C.	Hydro	100%	50			Sep-27
Oxnard	California	Nat. Gas	100%	49			May-20
Naval Station	California	Nat. Gas	100%	47	4%	\$ 12	Dec-19
Tunis	Ontario	Nat. Gas	100%	43	3%	\$ 9	Dec-14
North Island	California	Nat. Gas	100%	42			Dec-19
Kapuskasing	Ontario	Nat. Gas	100%	40			Dec-17
Nipigon	Ontario	Nat. Gas	100%	40	5%	\$ 15	Dec-22
North Bay	Ontario	Nat. Gas	100%	40	3%	\$ 9	Dec-17
Calstock	Ontario	Biomass	100%	35			Jun-20
Kenilworth	New Jersey	Nat. Gas	100%	30			Sep-18
Naval Training	California	Nat. Gas	100%	25			Dec-19
Morseby Lake	B.C.	Hydro	100%	6			Aug-22

Source: Atlantic Power Corporation, UBS

1Q15 Drop-Down Offers Similar Accretion

On Tuesday TERP announced that it acquired 168MW of primarily UK utility scale assets from sponsor Sun Edison's call-right list for \$110Mn in cash and \$177Mn of project debt attached. Management intends to maintain the project level debt for the next several months and then paydown with a combination of corporate-level debt and equity in accordance with its targets (3-4x Debt / CAFD). Run-rate unlevered CAFD guidance is \$24Mn (\$17Mn for 2015E) and assuming conservative 3x leverage, we estimate an 8.5% net equity yield (in-line with management's 8%+ unlevered cash return).

SUNE sold 168MW to TERP during 1Q15 with a

Figure 11: TERP-SUNE 1Q15 Drop Down Analysis

TERP-SUNE 1Q15 Drop-Down (\$Mn)	Transaction Capital Structure	\$Mn
287 Purchase Price	Total EV	0
215 Equity	Equity	110
72 Debt	Project Debt To Refinance	177
177 Debt Assumed	Corporate Debt	72
287 EV	Equity	105
31 EBITDA (UBSe)	Total Equity	215
9.2x EV / EBITDA	Total Debt	72
24 Gross CAFD (Guidance)	Total EV	287
-3 Less: Interest Expense		
21 Post-Financing CAFD		
3 Less: Distribution Reserve		
18 True' CAFD		
8.0x Effective Debt/EBITDA		
3.0x Debt / Gross CAFD		
Guidance: 3-4x Debt / CAFD		
8.4% Gross EV Yield		
6.3% Net EV Yield		
11.2% Gross Equity Yield		
8.5% Net Equity Yield		

Source: Company Filings and UBS Estimates

Viewing the Drop-Down Through a Solar Lens

With respect to sponsor SunEdison, the transaction implies a ~\$1.80/Watt ASP for the 168MW portfolio, towards the lower-end (\$4Q14 TERP drop-down \$ASP/Watt was \$2.21/W), but the 90%+ of the portfolio consists of UK utility scale assets which are probably closer to \$1.70/Watt. Given the magnitude (18MW) the remaining projects are likely larger DG installations, thus we suspect are closer to the \$2.80/Watt level rather than \$3.50/Watt for smaller residential installations.

90% of drop-portfolio at \$1.70/watt with balance at \$1.80/watt, resulting in weighted average of ~\$1.80/watt for SUNE (UBSe).

Adding Another Leg to the TERP Pipeline?

Storage offering likely expands margins rather than adds real MW potential

Earlier this month SunEdison announced the acquisition of Solar Grid Storage, a battery storage provider that is designed to pair with commercial PV projects. The typical configuration supports PV systems with 150kW to 10MW and is designed to reduce the need for a solar inverter, reducing installation costs. In addition to the base install savings and backup power supply, the battery can support demand response programs with Solar Grid Storage and the customer sharing the revenues 50%/50%.

Storage could be a nice complement to solar drop-downs into TERP.

This is a small acquisition for SunEdison and is unlikely to expand the pipeline materially in the near-term but is yet another service offering that can be added to C&I DG to enhance margins and improve CAFD. No terms were disclosed for the transaction but SUNE purchased the operating projects along with the pipeline and development team. We understand that the pipeline today is focused on the PJM frequency regulation market but we logically would expect this to be expanded to California and other markets over time.

Could others follow suit? Potentially but still small scale

With deal terms undisclosed this is a bolt-on acquisition that reaches into the ancillary services market. We expect the pairing of storage solutions with renewables to continue in the upcoming years but the economics appear to make the most sense for C&I distribution generation rather than residential at this time.

TerraForm Power, Inc. (TERP.O)

	12/12	12/13	12/14	12/15E	% ch	12/16E	% ch	12/17E	12/18E	12/19E
Income statement (US\$m)										
Revenues	16	17	126	486	286.2	687	41.4	882	1,476	1,935
Gross profit	14	16	107	404	275.7	577	42.9	727	1,209	1,559
EBITDA (UBS)	10	10	48	364	NM	537	47.6	687	1,169	1,519
Depreciation & amortization	(4)	(5)	(41)	(175)	331.5	(237)	35.3	(290)	(463)	(589)
EBIT (UBS)	5	5	7	189	NM	300	59.0	397	706	930
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	0	1	(7)	0	-	0	-	0	0	0
Net interest	(6)	(6)	(84)	(120)	-41.8	(193)	-61.5	(241)	(415)	(535)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	0	0	(84)	69	-	107	54.6	156	290	396
Tax	1	0	8	(28)	-	0	-	0	0	0
Profit after tax	1	0	(76)	41	-	107	157.7	156	290	396
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	3	(27)	-	(27)	0.0	(27)	(27)	(27)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	1	0	(73)	14	-	79	NM	129	263	368
Net earnings (UBS)	1	0	(73)	14	-	79	NM	129	263	368
Tax rate (%)	0.0	0.0	0.0	40.0	-	0.0	-	0.0	0.0	0.0
Per share (US\$)										
EPS (UBS, diluted)	0.03	(0.01)	(1.44)	0.23	-	1.05	352.0	0.76	1.14	1.34
EPS (local GAAP, diluted)	0.03	(0.01)	(1.44)	0.23	-	1.05	352.0	0.76	1.14	1.34
EPS (UBS, basic)	0.03	(0.01)	(2.37)	0.23	-	1.05	352.0	0.76	1.14	1.34
Net DPS (US\$)	0.00	0.00	0.27	1.30	381.5	1.53	17.7	1.90	2.28	2.61
Cash EPS (UBS, diluted)*	0.19	0.17	(0.64)	3.15	-	4.18	32.8	2.46	3.15	3.48
Book value per share	1.08	0.56	10.23	11.11	8.6	12.65	13.9	6.41	8.47	8.16
Average shares (diluted)	27.72	27.72	50.40	59.93	18.9	75.51	26.0	170.26	230.28	275.12
Balance sheet (US\$m)										
Cash and equivalents	0	1	468	447	-4.6	451	0.9	404	383	183
Other current assets	9	105	147	281	90.5	349	24.3	416	617	774
Total current assets	9	106	616	728	18.2	800	9.9	820	1,000	957
Net tangible fixed assets	112	407	2,308	3,920	69.9	5,240	33.7	6,306	10,178	12,740
Net intangible fixed assets	23	23	360	360	0.0	360	0.0	360	360	360
Investments / other assets	16	31	105	105	0.0	105	0.0	105	105	105
Total assets	159	567	3,389	5,113	50.9	6,506	27.2	7,592	11,643	14,162
Trade payables & other ST liabilities	7	91	116	246	111.4	347	40.9	444	741	971
Short term debt	3	37	73	111	52.74	124	11.75	217	292	375
Total current liabilities	10	129	189	357	88.8	471	31.8	661	1,033	1,346
Long term debt	103	400	1,525	2,659	74.4	3,622	36.2	4,354	7,097	8,932
Other long term liabilities	16	23	154	196	27.2	196	0.0	196	246	296
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	129	551	1,869	3,213	71.9	4,289	33.5	5,211	8,377	10,574
Common s/h equity	30	15	314	666	112.4	955	43.5	1,092	1,950	2,244
Minority interests	0	0	1,206	1,234	2.3	1,261	2.2	1,289	1,316	1,344
Total liabilities & equity	159	567	3,389	5,113	50.9	6,506	27.2	7,592	11,643	14,162
Cash flow (US\$m)										
Net income (before pref divs)	1	0	(73)	14	-	79	NM	129	263	368
Depreciation & amortization	4	5	41	175	331.5	237	35.3	290	463	589
Net change in working capital	0	0	121	(4)	-	32	-	31	95	74
Other operating	(1)	0	0	45	-	0	-	0	50	50
Operating cash flow	4	4	89	230	159.2	348	51.4	450	871	1,080
Tangible capital expenditure	0	(264)	(1,474)	(1,787)	-21.2	(1,557)	12.8	(1,356)	(4,335)	(3,151)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	0	0	0	0	-	0	-	0	0	0
Investing cash flow	0	(264)	(1,474)	(1,787)	-21.2	(1,557)	12.8	(1,356)	(4,335)	(3,151)
Equity dividends paid	0	0	(30)	(198)	NM	(257)	-30.1	(399)	(705)	(1,019)
Share issues / (buybacks)	0	0	697	536	-23.1	467	-12.8	407	1,300	945
Other financing	0	0	0	0	-	0	-	0	0	0
Change in debt & pref shares	(1)	302	1,190	1,173	-1.46	976	-16.80	824	2,819	1,918
Financing cash flow	(1)	302	1,856	1,511	-18.6	1,186	-21.5	832	3,414	1,844
Cash flow inc/(dec) in cash	3	42	471	(46)	-	(23)	48.8	(74)	(49)	(227)
FX / non cash items	-	(41)	(4)	25	-	28	12.2	28	28	28
Balance sheet inc/(dec) in cash	-	1	467	(21)	-	4	-	(47)	(22)	(199)

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.*Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

TerraForm Power, Inc. (TERP.O)

Valuation (x)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
P/E (local GAAP, diluted)	-	-	-	NM	36.5	50.6	33.5	28.6
P/E (UBS, diluted)	-	-	-	NM	36.5	50.6	33.5	28.6
P/CEPS	-	-	-	12.1	9.1	15.5	12.1	11.0
Equity FCF (UBS) yield %	-	-	-	(75.1)	(58.3)	(43.7)	(167.1)	(99.9)
Net dividend yield (%)	-	-	-	3.4	4.0	5.0	6.0	6.8
P/BV x	-	-	-	3.4	3.0	6.0	4.5	4.7
EV/revenues (core)	-	-	-	NM	8.9	8.0	6.1	4.7
EV/EBITDA (core)	-	-	-	13.8	11.4	10.3	7.7	5.9
EV/EBIT (core)	-	-	-	26.7	20.5	17.9	12.7	9.7
EV/OpFCF (core)	-	-	-	27.4	16.2	12.9	12.2	7.5
EV/op. invested capital	-	-	-	1.5	1.3	1.2	1.1	0.8
Enterprise value (US\$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Market cap.	-	-	-	2,073	2,073	2,073	2,073	2,073
Net debt (cash)	-	271	783	1,727	2,809	3,731	5,586	5,586
Buy out of minorities	0	0	1,206	1,234	1,261	1,289	1,316	1,344
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	-	-	-	5,033	6,144	7,092	8,976	9,003
Non core assets	(2)	(20)	0	0	0	0	0	0
Core enterprise value	-	-	-	5,033	6,144	7,092	8,976	9,003
Growth (%)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Revenue	-	11.3	NM	NM	41.4	28.4	67.3	31.1
EBITDA (UBS)	-	5.3	NM	NM	47.6	28.1	70.1	30.0
EBIT (UBS)	-	-3.4	40.1	NM	59.0	32.3	77.8	31.8
EPS (UBS, diluted)	-	-	NM	-	NM	-28.0	51.1	17.2
Net DPS	-	-	-	NM	17.7	24.2	20.0	14.5
Margins & Profitability (%)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Gross profit margin	NM	NM	NM	NM	NM	NM	NM	NM
EBITDA margin	61.0	57.7	37.9	74.8	NM	NM	NM	NM
EBIT margin	33.8	29.3	5.7	38.8	43.7	45.0	47.8	48.1
Net earnings (UBS) margin	5.6	NM	NM	2.9	11.5	14.6	17.8	19.0
ROIC (EBIT)	-	1.8	0.5	5.5	6.2	6.6	8.4	8.1
ROIC post tax	-	1.8	0.5	3.3	6.2	6.6	8.4	8.1
ROE (UBS)	-	(1.2)	(44.1)	2.8	9.8	12.6	17.3	17.5
Capital structure & Coverage (x)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Net debt / EBITDA	11.1	43.2	23.7	6.4	6.1	6.1	6.0	6.0
Net debt / total equity %	NM	NM	74.3	122.3	148.7	175.0	214.5	254.3
Net debt / (net debt + total equity) %	78.0	96.6	42.6	55.0	59.8	63.6	68.2	71.8
Net debt/EV %	-	-	-	46.2	53.6	58.7	78.1	NM
Capex / depreciation %	9.6	NM	NM	NM	NM	NM	NM	NM
Capex / revenue %	2.6	NM	NM	NM	NM	NM	NM	NM
EBIT / net interest	0.9	0.8	0.1	1.6	1.6	1.6	1.7	1.7
Dividend cover (UBS)	-	-	-	0.2	0.7	0.4	0.5	0.5
Div. payout ratio (UBS) %	-	-	-	NM	145.9	251.6	199.8	195.1
Revenues by division (US\$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Others	16	17	126	486	687	882	1,476	1,935
Total	16	17	126	486	687	882	1,476	1,935
EBIT (UBS) by division (US\$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Others	5	5	7	189	300	397	706	930
Total	5	5	7	189	300	397	706	930

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Forecast returns

Forecast price appreciation	-0.6%
Forecast dividend yield	3.6%
Forecast stock return	+3.0%
Market return assumption	5.5%
Forecast excess return	-2.5%

Statement of Risk

Risks to our investment thesis include: 1) corporate conduct as many board members are also on SunEdison's board; 2) contract risks as contracted assets comprise all of the portfolio; 3) reliance on wind power could create variability in generation output and thus potentially negatively affect earnings and distributions; 4) the current state of credit markets that has limited the companies' flexibility to return excess cash to shareholders; 5) unknown impact from a potential carbon legislation. Other investment risks include abrupt changes in weather patterns, sharp slowdown in economic demand, interest rate risks, and disruption of trading activity in power markets; 6) actual commodity prices differing significantly from our assumptions; 7) political and regulatory intervention to change the structure of competitive markets in response to high power prices and insufficient new build; 8) decrease of Investment Tax Credits to 10% in 2017.

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Buy	FSR is > 6% above the MRA.	47%	37%
Neutral	FSR is between -6% and 6% of the MRA.	42%	32%
Sell	FSR is > 6% below the MRA.	11%	21%
Short-Term Rating	Definition	Coverage ³	IB Services ⁴
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 December 2014.

1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

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Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Abengoa ^{4, 13, 16}	ABG.MC	Not Rated	N/A	€3.61	01 Apr 2015
NextEra Energy ^{2, 4, 6, 16}	NEE.N	Buy	N/A	US\$104.76	01 Apr 2015
NextEra Energy Partners LP ^{2, 4, 6, 16}	NEP.N	Neutral	N/A	US\$44.17	01 Apr 2015
NRG Energy Inc. ¹⁶	NRG.N	Buy	N/A	US\$23.60	01 Apr 2015
NRG Yield ¹⁶	NYLD.N	Neutral	N/A	US\$50.84	01 Apr 2015
SunEdison Inc. ^{13, 16}	SUNE.N	Buy	N/A	US\$25.10	01 Apr 2015
TerraForm Power, Inc. ¹⁶	TERP.O	Buy	N/A	US\$38.23	01 Apr 2015
TransAlta Corporation ¹⁶	TA.TO	Not Rated	N/A	C\$11.74	01 Apr 2015

Source: UBS. All prices as of local market close.

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