AES Corporation
A Chilean Curveball

Equities	
Americas	
Electric Utilities	
12-month rating	**Sell**
	Prior: Neutral
12m price target	**US$11.00**
Price	**US$12.85**
RIC: AES.N **BBG:** AES US	

Trading data and key metrics

52-wk range	US$13.26-8.54
Market cap.	US$8.48bn
Shares o/s	660m (COM)
Free float	100%
Avg. daily volume ('000)	1,337
Avg. daily value (m)	US$16.7
Common s/h equity (12/16E)	US$3.46bn
P/BV (12/16E)	2.4x
Net debt / EBITDA (12/16E)	4.9x

EPS (UBS, diluted) (US$)

	12/16E			
	From	To	% ch	Cons.
Q1	0.13	0.13	0	0.13
Q2E	0.15	0.17	12	0.17
Q3E	0.44	0.44	NM	0.30
Q4E	0.33	0.29	-12	0.40
12/16E	1.05	1.03	-3	0.99
12/17E	1.16	1.12	-4	1.13
12/18E	1.36	1.30	-5	1.27

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Downgrading to Sell: AES continues to climb, LatAm subsidiaries decline

AES Corporation shares continued to outperform its peers, trading at historic P/E highs not seen since late 2009. In retrospect, AES LatAm subsidiaries have lagged. AES Gener has fallen ~30% since June, underperforming the LatAm markets and AES Corp, which is up ~7%. AES' LatAm subsidiaries account for ~$4.80 (29% of total equity value per Holdco debt). We emphasize the Chilean underperformance is tied to concerns on pricing pressures from recent auctions in which renewables successfully undercut conventional resources at an average price of $47.59/MWh in late August. While AES's Chilean contracts remain largely long-dated into the early 2020's (this auction was for 2021), it is the first substantial indication of wider pressure from renewables on recontracting prices. We expect the latest pricing to prove the new normal (if not trending lower). Bottom line, with this sub having been the source of much of the capacity expansion and EPS growth through this decade, we see risks to backwardated cash flow, with FCF topping out in 2019.

Just moving with Brazil? AES hits multi-year P/E highs on higher EM move

Additionally, we emphasize that the correlation coefficient between the move in AES vs the Brazilian Bovespa is a r=0.94. In tandem with the Brazilian rally, AES Corp has had a parabolic run, trading nearly 12x P/E on FY2 basis (see chart below), well above its 5-year trend (and hitting highs only last seen in pre-recession rally) and beating both the UTY move up as well as sizably outperforming the domestic US IPPs.

DPL: ESP resolution is status quo rather than upside; skews negatively

While we expect the PUCO to rule favourably on this, with mgmt. largely assuming this in their EPS growth guidance, this remains a downside bias if unsuccessful. While other measures are being pursued of late to ensure continued above-market compensation, we see the overall context as presenting downside risk to our EPS estimates of upwards of ~$0.10 (declining over time, see full projections below).

Valuation: Downgrading to Sell, leaving $11 PT unchanged in our sum-of-parts

We are downgrading from Neutral to Sell amidst a substantial re-rating in shares, with AES trading largely in-line with peer IPPs in the US ~7x EV/EBITDA with Emerging Market Power & Utility exposure seemingly priced similar to US Power risk.

Highlights (US$m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Revenues	15,891	17,146	14,963	18,851	19,020	19,204	19,384	19,427
EBIT (UBS)	2,484	3,107	2,191	2,771	2,917	3,138	3,326	3,377
Net earnings (UBS)	958	942	814	676	727	836	934	966
EPS (UBS, diluted) (US$)	1.29	1.30	1.22	1.03	1.12	1.30	1.47	1.54
DPS (US$)	0.16	0.25	0.40	0.44	0.49	0.54	0.59	0.64
Net (debt) / cash	(19,485)	(19,397)	(20,083)	(19,422)	(18,634)	(17,807)	(16,856)	(15,904)

Profitability/valuation	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
EBIT margin %	15.6	18.1	14.6	14.7	15.3	16.3	17.2	17.4
ROIC (EBIT) %	8.9	11.3	8.1	10.5	11.2	12.3	13.2	13.7
EV/EBITDA (core) x	7.8	7.1	8.3	7.3	7.2	6.9	6.6	6.6
P/E (UBS, diluted) x	10.0	11.0	9.8	12.5	11.5	9.9	8.7	8.3
Equity FCF (UBS) yield %	12.5	(3.4)	0.7	8.0	12.7	13.8	15.5	15.9
Net dividend yield %	1.2	1.8	3.3	3.4	3.8	4.2	4.6	5.0

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of US$12.85 on 30 Sep 2016 19:36 EDT

UBS Research THESIS MAP a guide to our thinking and what's where in this report

PIVOTAL QUESTIONS

Q: What's happening in Chile?

We attribute much of the divergence between AES and its subsidiaries to the notion that AES is a diversified play on Latin America. AES has tracked well against the Brazilian Bovespa this year and we believe the strength of EM could continue to prop up the stock that is now trading near historic levels relative to the XLU. We see AES Gener as the largest divergence, due to poor results in the recent Chilean auction, pressure from renewables and their unfavourable coal asset mix.

more→

Q: Should AES be valued like an Emerging Market stock?

No. We believe AES' relative parabolic move in the past vs XLU is unwarranted. Investors have traded AES in tandem the recent EM recovery - the correlation between AES and the Brazilian Bovespa is 0.94 this year. We stress that Europe, Asia and North America make up 50% of AES Corp on our SOP.

more→

Q: Does the court blockings of Ohio's subsidy plan create downside risk to EPS?

Given we see most of the Street already assuming a DPL subsidy resolution we remain cautious as the timeline has now been pushed further back and a resolution remains unclear. We believe there is $0.10 of EPS downside in 2016E if DPL is not resolved.

more→

UBS VIEW

With shares trading above historical valuation levels and undiscussed risks at the AES Corp level pertaining to the latest in Chile – and risks for pressures beyond, we see risk of a re-rating back to recent levels. We see a protracted process in Ohio, risks of project delays, and fewer organic growth capital due to the higher dividends driving deceleration in EPS. .

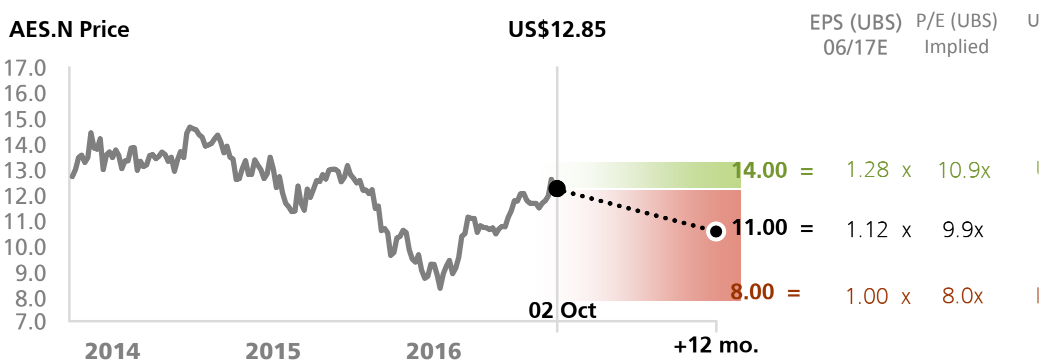
EVIDENCE

We see limited EPS upside, as we reflect the latest F/X and already reflect continued subsidies in Ohio. In contrast, we see risks to both the DPL ESP resolution as well as longer-term pricing risks in Chile.

WHAT'S PRICED IN?

Investors remain broadly focused on their ability to execute of late, avoiding pitfalls of recent memory around contracting risks, etc. As such, shares reflect much of this renewed enthusiasm for the sector, with shares now trading at multi-year relative highs vs. the XLU as well as versus recent AES history.

UPSIDE / DOWNSIDE SPECTRUM



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COMPANY DESCRIPTION

AES Corporation is a global power company operating primarily in the US, South America, Europe, and Asia. The company operates in two primary businesses, generation and utilities,...

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COMMENTARY

return ↑

Putting AES in the Context of AES Gener and Renewables More Broadly

AES Gener's stock has put upwards of ~$1/sh downside pressure to our SOP and AES shares. We note few US investors have noted the Chilean pressure of late, focusing alternatively on the US developments with DPL and improving prospects in Brazil and prospects for restructuring/sale of remaining utilities. In tandem, we note AES has outperformed its US IPP peers substantially who have been impacted by not just declining commodity prices but wider concerns of the need to deleverage to address longer-dated pressures. AES has meanwhile escaped much of this focus, with it even outperforming US Utilities by 20% since March as well as IPPs such as Calpine by ~60% since March as well.

AES' contracted portfolios limits immediate downside

While AES' exposure to renewable penetration in Chile is limited due to its largely contracted nature through ~2022 (albeit there are clearly open portions including ~50% of its under construction run of river hydro plant, Alto Maipo), we focus for the time on the seemingly meaningful delta between prices today on its portfolios (seemingly at least in the mid-60's) and the latest prices in the mid to low 40's/MWh and risks to the downside. While bulls in Chile point to the need for around-the-clock power, particularly for reliability hungry industrial customers, we see the wider pressure exhibited even in the ATC power blocks sold (~1/3rd of all sold) as still indicative of what downward pressure from both wind and solar can do to even this segment. We further emphasize with estimates on delivered solar prices collapsing of late, we wouldn't doubt further downward pressure in subsequent solicitations held by Chile later this year and in 2017 for even the same delivery periods. More to the point with industry experts estimating prices here are still in the $1/W range and ~$1.3/W range for solar and wind, respectively, we see risks to the downside at least for the solar component.

But it's not just about Chile – it's the broader portfolio

The Philippines would appear to be another market with risk

We emphasize our thesis on shares here lies not just on renewable pressures in Chile, but global pricing datapoints. Wind and Solar resources appear to have crossed the threshold to displace new thermal plants and confirms pressure upon expiration of existing contracts with plants developed by AES. Looking at the AES portfolio more broadly we would not be surprised to see other retirements as contracts come to expiration including Hawaii as well as in Southern California (replacements are already under way). Elsewhere though, we see parallels to Chile in the Philippine market where prices have historically been dictated by fuel oil (Chile is LNG based, with current market prices for delivery at ~$55/MWh). While AES is admittedly contracted in the near-term in all of these markets, the key question in supporting multiples off near-year EBITDA is the implied DCF through the asset life. In instances like Hawaii we see concerns around outright early retirement (post contract life), whereas Chile and the Philippines would appear to present more structural pressure to prices (and FCF). With delivered coal prices driving variable costs in the mid-$30's/MWh (UBSe), we see still positive cash flow margins, but dramatically lower than past levels. Importantly, from an EPS perspective, we suspect plants could well begin to drive negligible EPS as D&A (both expense and cash amortization on debt) as well as interest expense offsets these positive EBITDA margins.

PIVOTAL QUESTIONS

return ↑

Q: What's happening in Chile?

UBS VIEW

Chile's largest energy producer and publically listed AES Corp subsidiary, AES Gener has been pressured recently by renewables in the latest Chilean electricity auction for new auction. Gener's Guacolda failed to clear any load in the auction and has now only re-contracted 300GWh of its 1.2TWh load in this period. We see implications of the underlying business worse than the market perceives, given the equity impact on shares as well the continued pressure Gener is receiving from renewables. AES Gener is AES Corps largest listed subsidiary.

EVIDENCE

It is clear to us that renewables are gaining ground in Chile. 40% of the 12,450GWh annually on offer this past auction will be coming from wind producers. These contracts represent almost a third of the entire regulated supply to customers. We emphasize the expectation for continued pressure on fossil (coal) gencos from the likes of renewables in the region. Mgmt stated expectations for clearing prices in the Chilean electricity auction were in the ~$60's/MWh range vs the cleared price of $48/MWh, primarily from wind and solar generators aggressive bidding. We attribute AES Gener's large divergence from its parent to its poor results in the recent Chilean auction, pressure from renewables as well as its unfavourable coal asset mix.

WHAT'S PRICED IN?

AES Gener is ~$3 of equity value on a SOP basis. While the stock is down ~30% since the late June, we believe there is additional optimism from investors that regulators would want to limit exposure of single source variable generation. That said, we worry there could be greater re-contracting risk at Guacolda, given supportive renewable comments from the Chilean Energy Commission.

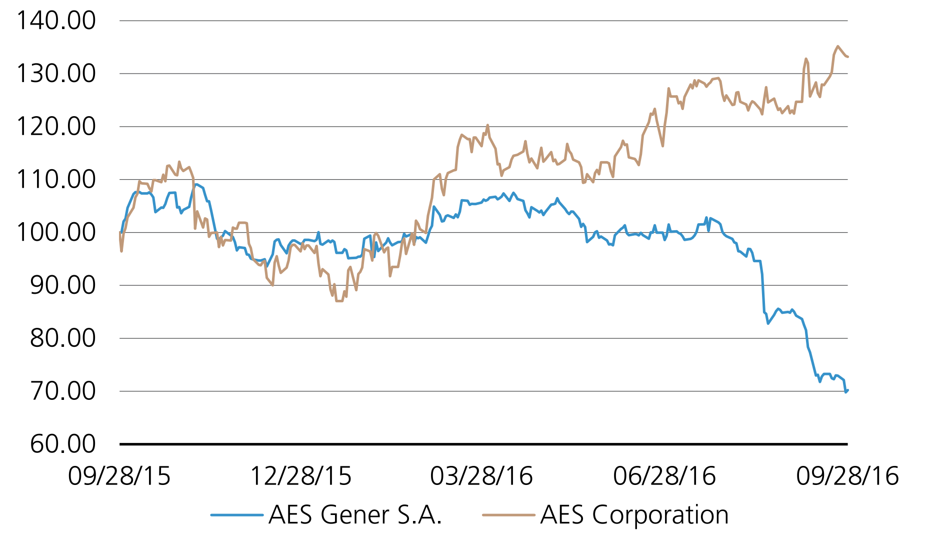
AES Gener going the other way

Following the recent Chilean electricity auction this past August, AES Gener walked away with zero load for its 50.1% owned subsidiary Guacolda. Guacolda, a Chilean coal power generator only has 300GW hours of its current non-contracted 810 TW hour annual load. Additionally, we would note that an impressive amount of wind generators aggressively bid into this past August auction, beating out the likes of coal with wins from renewables, thermos and hydro power. While we acknowledge that Guacolda is just one pie, this creates more uncertainty around the AES Gener portfolio, as investors will have greater focus around the re-contracting of their additional idle load. AES Gener has typically traded in-line or at a premium to a basket of Chilean utilities (see below chart) and has recently bifurcated from the group, materially underperforming. We would attribute much of the above to explain the recent move downward.

The recent underperformance of AES Gener is quite stark in relation to AES Corporation. We believe underperformance of AES Gener has been off investor's radar and note AES valuation has improved materially this year continuing to be a

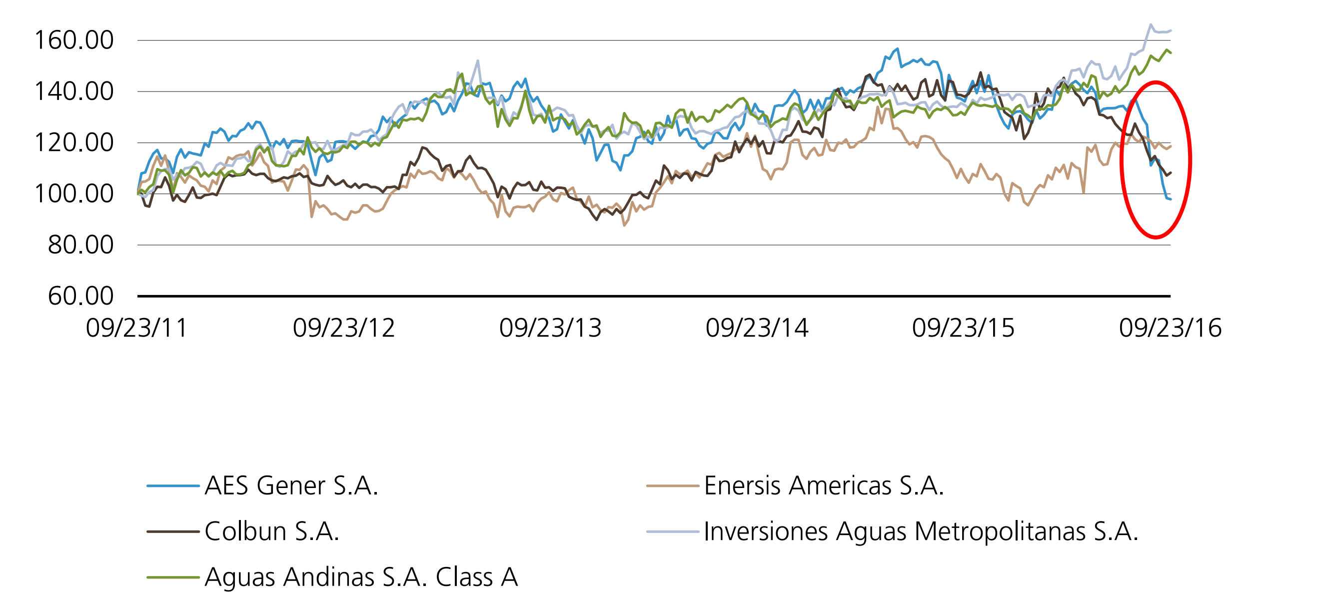
strong uncorrelated play vs the XLU. We ask if this is warranted given AES' general overexposure to coal (~40% on a MW basis), emerging markets, commodity risks and the ever changing US strategy that looms over the stock.

Figure 1: Price comparison : AES vs AES Gener (INDEXED)



Source: FactSet

Figure 2: AES Gener vs Other Chilean Utilities (INDEXED)



Source: FactSet

Wind Renewables Blow Away Coal

Mgmt cited wind generators bid very aggressively in the past Chilean auction resulting in clearing prices that were significantly less than what the market has expected. We believe expectations for the recent August auction were somewhere around $60/MWh vs cleared price of $47.55/MWh, a stark difference. Wind specifically will supply around 40% of the 12,450GWh annually on offer at the

tender. We emphasize new CEO strategy out of AES Gener is to move towards renewables, but we also note their leniency towards coal assets and continued investment in coal generators. In June 2011, new regulations on air emission standards were enacted in Chile, limiting particular matter and gasses produced by thermoelectric power generators. Since then, mgmt. has had to invest ~$500Mn at a consolidated level in emission reduction equipment in order to adequate its existing facilities and coal units including Guacolda. We would additionally note that AES Gener paid a lofty $728Mn to acquire a stake in the asset in mid-2014. While plants are now compliant today, we believe that the general environmental rhetoric in Chile, paid paired with Guacoldas re-contracting risk and continued pressure from renewables leaves us worried about where AES strategy is moving in Latin America. Andres Romer, Executive Secretary of the National Energy Commission noted at a recent Chilean energy conference that renewables should reach 30% mix by 2030.

We continue to see renewables pressuring the region due the mount of global horizontal irradiance in Chile, paired with the decreasing capital costs associated with the projects. This said, given the influx of renewables to the latest auction, we believe that regulators in Chile will want to limit exposure to single generation types, possibly creating a catalyst for Guacolda down the road.

Where is the Portfolio Repositioning? Still Focused on Americas

We expect the company to continue to execute on a repositioning in its portfolio towards the Americas, with a focus on growth in Central and North America. We would expect potential divestments to remain oriented towards Europe and Asia, consistent with recent sales. The one exception appears to be Brazil where historical correlations appear to have a disproportionate impact on shares.

Figure 3: SOP Valuation Ex-Listed LatAm Subs

Summary SOP Valuation for AES Corp	% Owned by AES	Low	Base	High
Listed Latin American Subsidiaries		$4.66	$4.66	$4.66
Latin American Utilities (Unlisted)		$0.11	$0.44	$0.67
Latin American Generation (Unlisted)		$2.31	$3.48	$4.67
North American Utilities		$2.27	$2.34	$2.46
North American Generation		$2.18	$2.92	$4.39
Asian Generation		$0.91	$1.26	$1.16
European Generation		$0.94	$1.46	$1.98
Summary SOP Valuation for AES Corp		Low	Base	High
Total Subsidiaries Equity Value		$13.38	$16.55	$19.99
AES Subsidiaries Equity Value Ex-Listed Latin America Subs		$8.72	$11.89	$15.33
AES Corp Total Equity Value, Ex-Listed Latin America Subs		$2.95	$6.12	$9.55

Source: Company Filings, FactSet, and UBS Estimates

What are our estimates?

Our estimates are tweaked down vs. prior principally to reflect F/X and commodity updates in addition to our PJM capacity forecast; we note our estimates were previously above Street consensus, but suspect Street is more appropriate (we caution that Street itself could still update to a lower deck into 3Q results albeit are already set at the lower end of the 12-16% EPS growth guidance range). We emphasize the improvement in EPS through 2018 remains the key driver to re-rating of late.

We note the Andes (Gener) segment was the largest earnings segment in 2Q and was ~tied YTD. We expect this segment to *become* the largest through the ~$300 Mn/yr in EBITDA growth as forecast as construction remains underway for key assets such as the Alto Maipo run of river facility (~$0.10/sh in EPS terms) in addition to the new coal plant, Cochrane entering in-service in 2H16.

Figure 4: AES EPS estimates

	2015A	2016E	2017E	2018E	2019E
UBS EPS estimates	1.22	1.03	1.12	1.30	1.47
EPS Growth	-6.1%	-16.0%	8.9%	16.4%	13.2%
Guidance (Low)		0.95	1.12	1.25	
Guidance (High)		1.05	1.16	1.35	
Previous EPS		1.05	1.16	1.36	1.56
Consensus		*0.99*	*1.12*	*1.26*	*1.32*

Source: Company Filings, FactSet, and UBS estimates

PIVOTAL QUESTIONS

return ↑

Q: Should AES be valued like an Emerging Market stock?

UBS VIEW

No. We believe AES' relative parabolic move in the past vs XLU is unwarranted. Investors have traded AES in tandem the recent EM recovery - the correlation between AES and the Brazilian Bovespa is 0.94 this year. We stress that Europe, Asia and North America make up 50% of AES Corp on our SOP outside of LatAm. Mgmt has noted in recent periods concern around its high correlation with Bovespa to both the upside and downside and appears poised to sell down its remaining utility interest (after addressing its latest Sul biz) to remove this segment).

EVIDENCE

Our SOP analysis suggests that AES' listed LatAm subsidiaries account for roughly 30% of total subsidiary equity value. The subsidiaries, particularly AES Gener have not participated in the recent recovery in Emerging Markets. AES Gener is down 30% since the end of June 2016. Furthermore, Europe, Asia and North American make up 50% of AES Corp. We view the .94 correlation to the Bovespa as unwarranted.

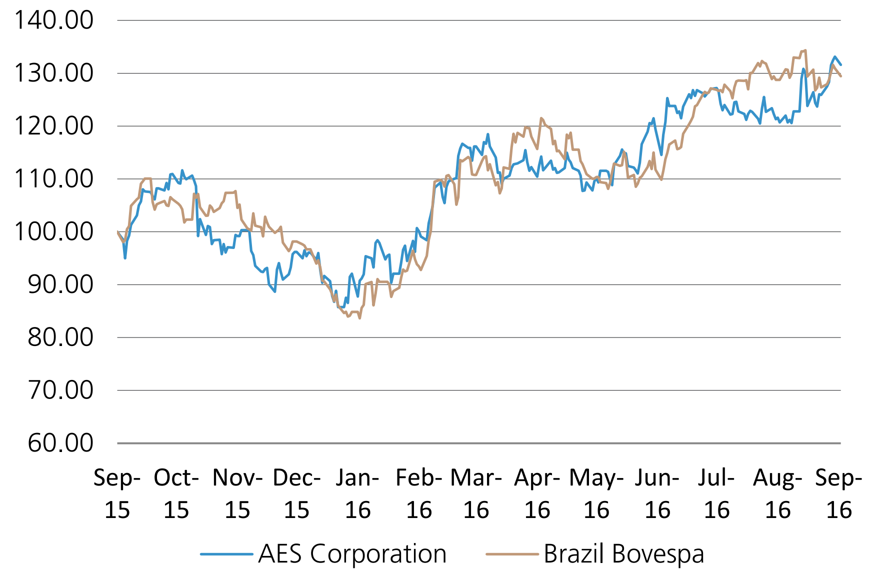
WHAT'S PRICED IN?

Investors seem to be mispricing the volatility and risk within AES listed subsidiaries. AES Gener is down 30% from June 2016. We would also note that we see AES Tiete ($1.50 of SOP) as fully pricing in the expectations for longer energy prices and that Eletropaulo continues to face fundamental headwinds.

EM a proxy for AES?

We would note that AES gives investors an opportunity to diversify exposure away from utilities and IPPs as it historically provides less correlated performance relative to the XLU. That said we would attribute some of AES outperformance to its diversified play on emerging markets through its various Latin American entities. We note that AES has tracked well against the Brazil Bovespa index with a 0.94 correlation on the year. We look to gain more clarity around AES' EM prospects as it is a clear driver of the valuation but we also stress this is just one piece of the overall AES story – in our view, the strength is overdone. Mgmt recently noted they're continuing to see better prices in Brazil and to us we wonder if they will seek to expand or contract overall Brazil exposure. Mgmt. will likely need to carefully evaluate its next capital deployment in the country seeing that AES Corp remains so correlated to emerging markets.

Figure 5: AES performance vs Brazil Bovespa Index



Source: FactSet

US IPPs vs. AES

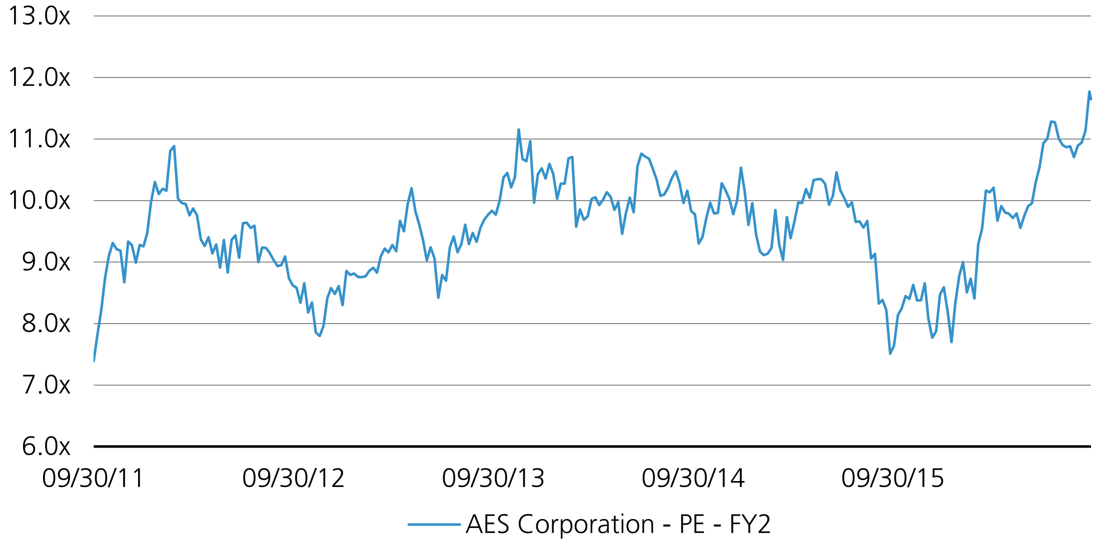
We apply a 7x base EV/EBITDA multiple to value US IPPs. We note this is almost a full turn below where the group currently trades (7.9x) on 2017E numbers. AES specifically trades at 7.8x, which we view as overvalued given their mix of Emerging Market assets. We apply a 6x multiple to the Latin American subsidiaries given the increased risks of operating an EM entities such as FX risk and associated changes in interest, political uncertainty, unfavourable weather/precipitation, adverse political/legal/regulatory actions, more volatile economic conditions, changes in interest and foreign currency exchange rates, social and political instability. AES' private Latin American Gencos and utilities fit this profile. We note that while AES business has similar strategies to our US IPP coverage, the difference in operating regions and AES' vast list of foreign entities command a lower multiple.

Valuation now at 5 year highs

On a FY P/E basis, shares have once again found new highs this year. AES is now trading at 11.7x our FY 2017E EPS of $1.12. We note forward PE has not reached this level since the company levered up in December of 2009. We ascribe much of AES recent outperformance to the utility it brings to investors as a diversified play on global markets, especially EM/Frontier markets. Based on our sum-of-the-parts, AES' LatAm subsidiaries account for ~$4.80 of our total base subsidiary equity value of ~$16.60. We emphasize this accounts for ~30% of overall equity value, before adjusting for parent debt. We note deteriorating fundamentals at AES Eletropaulo, AES Gener and a run up in multiples within the region due to M&A, recovery in energy prices, and better regulatory framework have left us to be cautious on AES Corporation which has had an outsized run relative to other investor owned utilities.

Figure 6: AES FY2 Forward PE – Trading Much Better than Historical Levels

The question is just how much more re-rating can we see in shares?

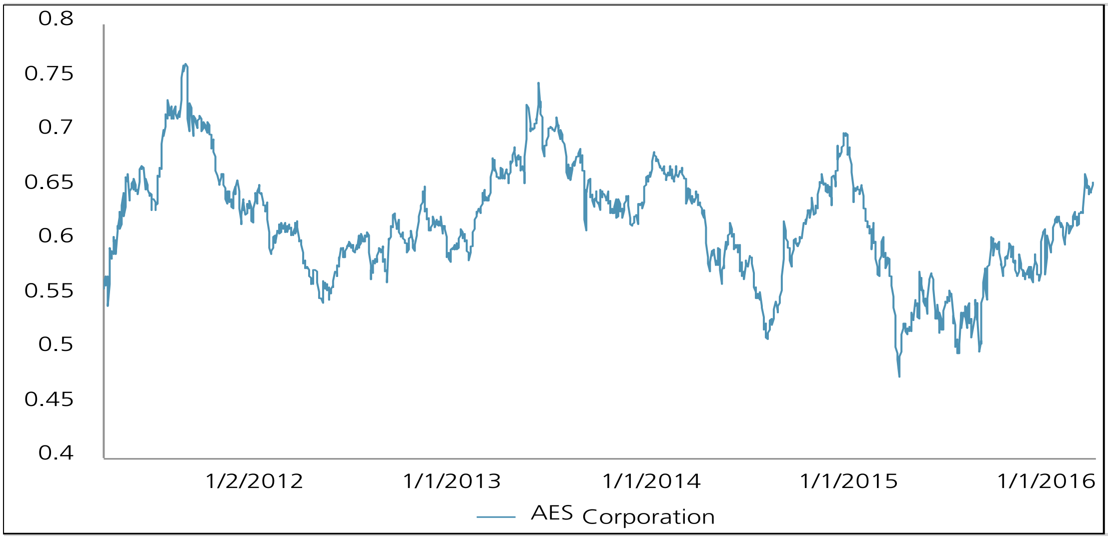


Source: FactSet

What about relative?

Here too shares have performed well.

Figure 7: AES 2 Yr Fwd P/E relative to XLU



Source: , FactSet

Macro: What's Happening in LatAm?

We apply a ~6x multiple to the LatAm subsidiaries within AES' portfolio, which is only 1x below our US IPP base multiple. While we acknowledge that macro trends are improving in Latin America, we retain our 6x multiple for the LatAm IPPs to account for the increased risk of operating in emerging/frontier markets. Below we summarize key takeaways from the UBS Latin America Economist Team

- Brazil: Inflection point nearing? The past few years have been characterized by global economic headwinds and the absence of structural reforms led to economic growth moderation. Our team believes the preliminary signs of an inflection point are being seen, with a bottom coming this quarter (3Q16). Michel Temer's interim government has given indications that it can command a sufficiently large majority in Congress, which – combined with the reformist economic team – has increased hope the country will approve some much-needed structural reforms. See additional Brazil takeaways here.

- Chile: The downturn in copper prices has put a large dent on mining activity and investment, but falling grades of copper ores are also weighing on the sector of the economy. Ex-mining, the economy is performing better, but weak investment has put a lid on growth. We would note that AES Gener has recently been experiencing lower volume sales to regulated and unregulated customers, pointing to lower mining production during the 1H of 2016. Our peers on the Latin American Econ team have noted Chile's share of global copper production has been declining in recent years, and a fall in copper prices has led to a sharp contraction in mining. See additional Chile takeaways here.

- Argentina: Market expectations for a rapid return to economic growth and lower inflation are higher than originally anticipated. The Marci administration has a difficult task ahead of it when it comes to stabilizing the economy. Our team is encouraged by how quickly new authorities removed some of the largest barricades to macroeconomic adjustment, such as liberalizing the exchange rate, lifting export controls and resolving the credit standoff with respective holdouts. We note AES mgmt has been increasingly confident in their tone regarding eventual lifting of price caps in Argentina. See additional takeaways here

Why did Brazilian Utilities Rally?

We would note Brazilian utilities have sustained a large rally fuelled by the following:

- Regulatory Framework Improving Investor Appetite: Change in federal gov't has helped the perceived risk of the investment landscape. Additionally, the new minister of mines and energy changed the key positions within the administration, appointing professionals with a market friendly view.

- M&A: China's State Grid has made a bid for the largest private utility company in Brazil (CPFL). Many companies that could benefit from M&A have outperformed, including AES Eletropaulo. However, Eletropaulo is cash flow negative, with increasing opex, and is suffering from regulation penalties. Our LatAm analyst believes the chances of selling Eletropaulo are low, given uncertainties related to the size of its off-balance-sheet liabilities. The main uncertainty is about the size and outcome of a 20-year lawsuit

involving Eletrobras, Eletropaulo and Cteep. This is a R$2bn dispute that could impact Eletropaulo's earnings and even its cash flow estimates as early as 2017. Eletrobras' management indicated that it expects another lower court ruling in 2H16; if it turns out to be unfavorable for Eletropaulo, Eletrobras could request the deposit of legal guarantees. Given the most recent development in the dispute, Eletrobras believes execution of the guarantees will only be possible in 2017. AES's CEO (Mr. Nebreda) said that although he believes Cteep should be the company responsible for this liability with Eletrobras, AES is considering settling the case to reduce share price uncertainty. He mentioned that most of the market has already adjusted from Eletropaulo's fair value of cR$2bn related to this lawsuit. He expects the judge to decide on the amount of the liability and on which company should pay it by the end of this year. Therefore, any potential M&A may only happen after this case is settled, which could take some time.

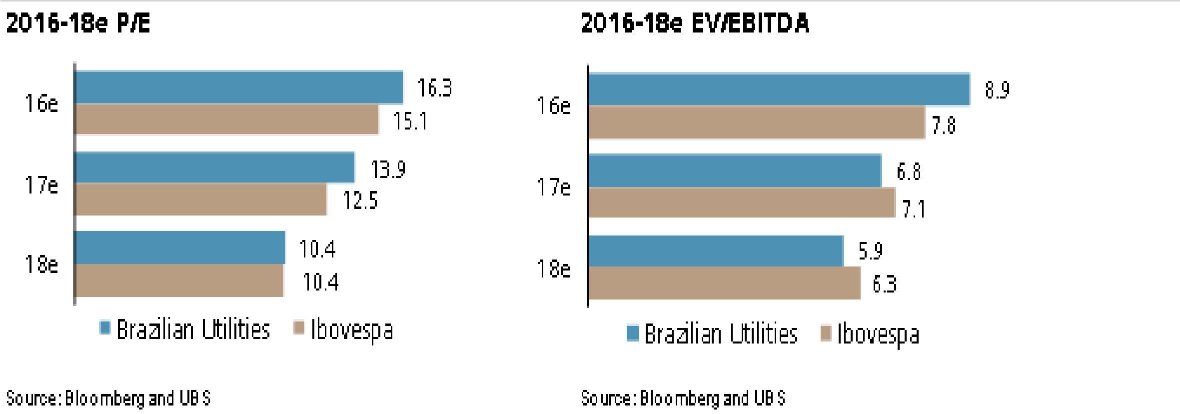
- Recovery in energy prices: The improvement in spot price from R$30/MWh in the beginning of the year to current ~R$150/MWh can be explained by below average rainfall as well as better than expected energy demand. Gencos with uncontacted capacity such as AES Tiete have outperformed given better energy price outlook. We believe current stock price already incorporates higher expectations for long term energy prices.

See the link to the latest AES Tiete report.

But where are the Brazilian and LatAm comps trading?

The focal point in our South and Central American valuation is the valuation of unlisted peers. We continue to apply a 6x EV/EBITDA, which is behind the recent rally in LatAm comps, albeit we see this as appropriate given the lower degree of estimate certainty as well as limited set of comps for businesses in the Dominican Republic and Argentina for instance in public utilities. We note even applying a full 7x EV/EBITDA multiple would <u>still yield just a $12 valuation</u>, still a Sell rating under our methodology. Among the wider questions is how tight can US (and OECD) valuations trade relative to Emerging Markets (specifically LatAM).

Figure 8: Brazilian Utilities Valuation vs Ibovespa



Source: Bloomberg, UBS

Where are Comps Trading?

Subsidiaries of Brazilian utility comps are trading on average at ~6-7x EV/EBITDA on 2017 estimates, better than in recent years, but even at these higher valuations (off lows of ~5x), AES shares would still appear expensive ($12/sh when applying 7x EV/EBITDA to unlisted subsidiaries). While we acknowledge improvement, the question is just what is developing

PIVOTAL QUESTIONS

return ↑

Q: Does the court blockings of Ohio's subsidy plan create downside risk to EPS?

UBS VIEW

With the Street already assuming a DPL subsidy resolution we don't see successful resolution of this as upside. We believe there is $0.10 of EPS downside in 2016E if DPL is not resolved, albeit closer to $0.05-0.07 in our forward estimates if not successful. We emphasize the bias is that this indeed a constructive outcome and among the contributing factors behind why shares have done well of late.

EVIDENCE

We see clear downside risk to estimates as many investors have not removed this from estimates as management cautioned that a reversion to ESP I tariffs was a plausible backstop seemingly until an appropriate form of subsidy is derived. The question is if there is any that works for the generation only segment. We remain biased to see positive resolution

WHAT'S PRICED IN?

A key focus from investors is what will happen with DPL's Ohio Genco assets as Ohio's original plan to provide ~$100 Mn/yr in subsidies to the plants was recently rejected by the courts. We believe a majority of models are already accounting for this. This is principally downside. Mgmt did not adjust its guidance with 2Q16 assuming constructive resolution; this has improved sentiment on shares of late.

DPL: What will come of the portfolio?

A further key aspect in Ohio remains what will become of DPL's own generation portfolio. We note under the now vacated ESP II tariffs the company was previously under, there was a determined timeline to eventually split apart the Genco from the Utility assets, but we note this was declared void by the court. The company has reverted to its initial ESP I rates though we note these are not materially different than ESP II. ESP 1 rates will remain in effect until ESP III tariff negotiations are resolved. Now that all options are on the table, we emphasize mgmts main focus is to resolve ESP III. We originally expected ESP III to be resolved by year end, but now with new a new distribution modernization rider in the mix, we question whether this NT catalyst could be pushed further. Note we already reflect a bailout in our numbers.

DPL recently withdrew plans to pursue an income guarantee for more than 2,000MW of coal assets in Ohio and instead will seek a rider tied to modernizing its distribution system. The Distribution Modernization Rider (DMR) will now be part of the proposed ESP plan. We view this as a negative for AES as DPL is now facing additional obstacles in their plan to aid some of their largest power plants. Additionally, we would note the rider introduced a Clean Energy Rider that will help facilitate future investment in renewable and advanced technologies.

Our latest MtM for DPL assumes a $5/kW-yr cost cut on generation to maintain breakeven generation margin for 2018 and 2019.

Figure 9: DPL Projected EBITDA for Consolidated Entity

DPL Inc. Mini-Model	2016	2017	2018	2019	2020
T&D	175	180	186	191	197
Assuming ~3% growth for below-averge Utility					
Generation (Energy Margin + Capacity)	23	26	21	(4)	(1)
ESP Above-Market Assumption	100	80	70	50	50
Legacy Rates Benefit	-	-	-	-	-
Hedges (UBSe)	-	-	-	-	-
Switched (avg)	0.00%	0.00%	0.00%	0.00%	0.00%
Legacy Book	12	12	12	12	12
Above Market ($/MWh)	40	50	50	50	50
Total EBITDA	298	287	277	237	246
Guidance	*~$360M per year*				
Int. Exp	(111)	(105)	(98)	(94)	(87)
EPS	0.06	0.05	0.05	0.02	0.03
Interest Expense	111	105	98	94	87
Capex	133	129	131	130	131
FCF	53	52	48	13	28

Source: Company reports and UBS estimates

Assets at DPL

Figure 10: DPL Ohio Assets

Power Plant	Owner	Ultimate Parent	Operating Ownership (%)	State	Fuel Type	Operating Capacity (MW)	Owned Operating Capacity (MW)	Year First Unit in Service	Capacity Factor (%)
Conesville	Dayton Power and Light Company	AES Corporation	8	OH	Coal	1,590	128.8	1957	59.50
Frank M Tait GT	Dayton Power and Light Company	AES Corporation	100	OH	Gas	304	304.0	1995	0.51
Frank M Tait IC	Dayton Power and Light Company	AES Corporation	100	OH	Oil	10	10.0	1967	0.05
J.M. Stuart	Dayton Power and Light Company	AES Corporation	35	OH	Coal	2,308	807.8	1970	51.13
J.M. Stuart IC	Dayton Power and Light Company	AES Corporation	35	OH	Oil	9	3.1	1969	0.75
Killen CT	Dayton Power and Light Company	AES Corporation	67	OH	Oil	24	16.1	1982	0.40
Killen Station	Dayton Power and Light Company	AES Corporation	67	OH	Coal	600	402.0	1982	72.69
Kyger Creek	Dayton Power and Light Company	AES Corporation	5	OH	Coal	991	48.5	1955	63.30
Miami Fort	Dayton Power and Light Company	AES Corporation	36	OH	Coal	1,020	367.2	1949	74.07
Monument	Dayton Power and Light Company	AES Corporation	100	OH	Oil	12	12.0	1968	0.10
O.H. Hutchings CT	Dayton Power and Light Company	AES Corporation	100	OH	Gas	33	33.0	1968	-0.36
Sidney	Dayton Power and Light Company	AES Corporation	100	OH	Oil	12	12.0	1968	0.11
W.H. Zimmer	Dayton Power and Light Company	AES Corporation	28	OH	Coal	1,344	377.7	1991	61.87
Yankee Solar Facility	Dayton Power and Light Company	AES Corporation	100	OH	Solar	1	1.1	2010	14.05
Yankee Street	Dayton Power and Light Company	AES Corporation	100	OH	Gas	109	109.0	1969	0.03
						Total	**2,691**		

Source: SNL

What else do we need to know?

Environmental liabilities: Not so much, but ash is unclear

From a compliance perspective the AEP portfolio appears largely in compliance with all pending regulations. While the sale of Gavin retains a $75 Mn Asset Retirement Obligation (ARO) with AEP, any incremental obligations beyond this level would accrue to the JV acquirers. We note this plant has the most.

Cleaning up the Ownership Structure to Save Costs

We note there are three separate co-owned plants in Ohio, between AES (DPL), DYN (formerly DUK), and AEP (not yet sold). We note interest from all parties in their desire to re-arrange the structure of this arrangement to improve the cost position of these plants, if aligned under a single owner. We believe one avenue in achieving this would be to effectively align a single plant to each of the companies. DYN has been outspoken despite seemingly holding out historically on realignment in the portfolio to extract maximum synergies from its acquisition last year of Duke's interest in the portfolio. The question remains whether AEP's future potential divestment of these few remaining coals assets could be a motivating factor for a restructuring

AES strategy lends itself towards eventual divestment

AES was already under a deal with ESP II to divest

We emphasize the company's underlying strategy would appear to lend itself towards an eventual separation and divestment of the generation portion of the business given the company's overall desire to reduce volatility derived from F/X and commodity exposure. We note that given the company's indebtedness it is unclear how such a sale could proceed. We note the company had previously contemplated a divestment per media reports in recent years but opted not to execute.

Our Full SOP Valuation

We reflect market multiples for the businesses below off the latest US P/E multiples of regulated utilities and IPPs.

Figure 11: SOP View for AES – Part I

Sum of the Parts Analysis - Hedged Analysis - UBSe								
Latin America Listed Subsidiaries						Low	Base	High
Listed Subsidiaries	AES Tiete (Common, GETI3)	AES Tiete (Pfd, GETI4)	AES Eletropaulo (Common,	AES Eletropaulo (Pfd, ELPL4)	AES Gener			
UBS Price Target	17.00	20.00	30.28	6.00				
Current Share Price	16.50	3.27	55.20	10.94	223.01			
% Upside	3%	512%	-45%	-45%				
Ownership %	32.96%	14.94%	35.95%	3.41%	67.00%			
Shares O/S	197	735	67	101	8,070			
F/X Rate	3.23	3.23	3.23	3.23	662.50			
Market Value Stake	332	111	409	12	1,820		2,684	
UBS-Implied Equity Stake	342	679	224	6	1,820		3,072	
Premium PN/ON	-80%		-80%		Brazil		1,252	1.90026134
Shares Outstanding						659	659	659
Implied Equity Value of Foreign Listed Subsidiaries (per Share)						4.66	4.66	4.66
AES Gener						*$2.76*	*$2.76*	*$2.76*
AES Tiete						*$1.55*	*$1.55*	*$1.55*
AES Electropaulo						*$0.35*	*$0.35*	*$0.35*
Latin American Utilities	2016 EBITDA	EV/EBITDA Multiple				Enterprise Value		
						Low	Base	High
Sul	0	0.0x	0.0x	0.0x		-	-	-
El Salvador	76	5.0x	6.0x	8.0x		378	453	604
Total LatAm Utilities (Non-Listed) EV	*76*	*5.0x*	*6.0x*	*8.0x*		*378*	*453*	*604*
Net Debt								
Sul - Equity Infusion Pending Sale of Company							75	
El Salvador							(239)	
Total LatAm Utilities Equity Value						214	289	440
Shares Outstanding						659	659	659
Total LatAm Utility Value Per Share (Non-Listed)						$0.32	$0.44	$0.67
Sul						*$0.11*	*$0.11*	*$0.11*
El Salvador						*$0.00*	*$0.33*	*$0.55*
	2016 EBITDA	EV/EBITDA Multiple				Enterprise Value		
Latin American Generation						Low	Base	High
Private Subsidiaries								
Uruguaiana CCGT	1	5.0x	6.0x	8.0x		7	9	12
Argentina Generation Portfolio	176	5.0x	6.0x	8.0x		879	1,055	1,406
Panama Generation Portfolio (AES Interest)	181	5.0x	6.0x	8.0x		907	1,089	1,451
Panama CCGT Expansion (Equity Investment)							250	
Dominican Republic Portfolio	162	5.0x	6.0x	8.0x		808	969	1,293
Total LatAm Generation (Non-Listed) EV	*520*	*5.0x*	*6.5x*	*8.0x*		*2,601*	*3,372*	*4,162*
Net Debt								
Argentina Generation Portfolio							(201)	
Panama Generation Portfolio							(543)	
Dominican Republic Portfolio							(329)	
Total LatAm Generation Equity Value						1,529	2,299	3,090
Shares Outstanding						659	659	659
Total LatAm Generation Value Per Share (Non-Listed)						$2.32	$3.49	$4.69
Uruguaiana CCGT						*$0.01*	*$0.01*	*$0.02*
AES Argentina						*$1.03*	*$1.30*	*$1.83*
AES Panama						*$0.55*	*$1.21*	*$1.38*
AES Dominican Republic						*$0.73*	*$0.97*	*$1.46*

Source: Company Filings, FactSet, and UBS Estimates

Figure 12: SOP View for AES – Part II

North American Utilities - DPL					Enterprise Value		
DPL	2017 Net Income		P/E Multiple		Low	Base	High
T&D Utility	68	17.3x	18.3x	20.3x	1,181	1,249	1,385
		Peer Multiple =	*18.8x*				
		Premium/Discount =	*-0.5x*				
Add: Back Hypothetical Debt					650	650	650
T&D Utility EV					1,831	1,899	2,035
	2016 EBITDA (Gen)						
Generation (excludes ESP uplift)	23	6.0x	7.0x	9.0x	136	159	204
DPL-ER	-	4.0x	5.0x	7.0x	-	-	-
Merchant EV					136	159	204
ESP Rates (Nonbypassable, NPV) - Estimated Contribution @ 50% Prob					87	87	87
Total DPL Debt (DP&L and Inc.)					(1,817)	(1,817)	(1,817)
DPL Equity Value					237	328	509
	2017 Net Income		P/E Multiple				
IPL (Indianapolis Power & Light)	117	18.3x	18.8x	19.8x	2,140	2,198	2,315
		Peer Multiple =	*18.8x*				
		Premium/Discount =	*0.0x*				
IPALCO Ownership post-Selldown					70%	70%	70%
AES' Equity Value in IPL					$1,498	$1,539	$1,620
Total US Utility Equity Value					$1,498	$1,539	$1,620
Shares Outstanding					659	659	659
Total US Utility Value Per Share					$2.27	$2.34	$2.46
DP&L (Dayton Power & Light)					*$0.36*	*$0.50*	*$0.77*
IPL (Indianapolis Power & Light)					*$2.27*	*$2.34*	*$2.46*

Source: Company Filings, FactSet, and UBS Estimates

Figure 13: SOP View for AES – Part III

European Generation	2016 EBITDA	EV/EBITDA Multiple			Low	Base	High
Private Subsidiaries							
AES Bulgaria (Maritza Lignite Plant)	215	4.0x	5.0x	6.0x	859	1,074	1,288
Kazakhstan	61	6.0x	7.0x	8.0x	366	427	488
UK Gen (Ballylumford CCGT and Kilroot Coal)	42	6.0x	7.0x	8.0x	250	292	333
Jordan (CCGT)	28	5.0x	6.0x	7.0x	139	166	194
Total European Generation EV	*350*	*4.7x*	*5.7x*	*6.7x*	*1,644*	*1,995*	*2,345*
Net Debt							
AES Bulgaria (Maritza Lignite Plant)						(595)	
AES Hungary (Tisza II Plant)						-	
Kazakhstan						(29)	
UK Generation (Ballylumford CCGT and Kilroot Coal)						(1)	
Jordan (CCGT)						(372)	
Total Net Debt						(1,157)	
Total European Generation Equity Value					612	962	1,312
Shares Outstanding					659	659	659
Total European Generation Value Per Share (Non-Listed)					$0.93	$1.46	$1.99
AES Bulgaria (Maritza Lignite Plant)					*$0.40*	*$0.73*	*$1.05*
AES Hungary (Tisza II Plant)					*$0.00*	*$0.00*	*$0.00*
Kazahkstan					*$0.51*	*$0.60*	*$0.70*
UK Generation (Ballylumford CCGT and Kilroot Coal)					*$0.38*	*$0.44*	*$0.50*
Jordan (CCGT)					*-$0.35*	*-$0.31*	*-$0.27*
Asian Generation	2016 EBITDA	EV/EBITDA Multiple			Low	Base	High
Private Subsidiaries							
Philipines (Masinloc), 51% Interest	55	6.0x	7.0x	8.0x	327	382	436
Masinloc Expansion (Equity Investment)						150	
Vietnam (Mong Duong), in-service	137	7.0x	7.0x	7.0x	961	961	961
Sri Lanka (Kelantissa)	27	6.0x	7.0x	8.0x	162	189	216
Total European Generation EV	*219*	*6.6x*	*7.7x*	*7.4x*	1,450	1,681	1,613
Net Debt							
Philipines (Masinloc), 51% Interest						(204)	
Vietnam (Mong Duong), In-service in 2016 - $809Mn 51% owned						(646)	
Sri Lanka (Kelantissa)						-	
Total Net Debt						(850)	
Total Asian Generation Equity Value					600	831	763
Shares Outstanding					659	659	659
Total Asian Generation Value Per Share (Non-Listed)					$0.91	$1.26	$1.16
Philipines (Masinloc)					*$0.19*	*$0.50*	*$0.35*
Vietnam (Mong Duong), in-service in 2016					*$0.48*	*$0.48*	*$0.48*
Sri Lanka (Kelantissa)					*$0.25*	*$0.29*	*$0.33*

Source: Company Filings, FactSet, and UBS Estimates

Figure 14: SOP View for AES – Part IV

North American Generation	2016 EBITDA	EV/EBITDA Multiple			Low	Base	High
Southland (Contracted Gas in CA) - Re-contracte	119	6.0x	7.0x	9.0x	711	830	1,067
Mountainview	5	6.0x	7.0x	9.0x	30	35	45
Warrior Run (Contracted Coal in MD): Thru 2030	66	6.0x	7.0x	9.0x	398	464	597
Shady Point (Contracted Coal in OK)	27	6.0x	7.0x	9.0x	162	189	243
Hawaii (Contracted Coal in HI)	47	5.0x	6.0x	8.0x	235	282	376
Puerto Rico (Contracted Coal in PR)	148	5.0x	6.0x	8.0x	740	887	1,183
Merida (Contracted CCGT in Mexico)	37	6.0x	7.0x	9.0x	222	259	333
TEG/TEP (Contracted Coal in Mexico)	77	6.0x	7.0x	9.0x	465	542	697
Total North American Generation EV	526	*5.6x*	*6.6x*	*8.6x*	2,963	3,489	4,542
Net Debt							
Southland						(152)	
Warrior Run						(103)	
Shady Point						(39)	
Hawaii						(232)	
Puerto Rico						(446)	
TEG/TEP						(300)	
Total Net Debt						(1,272)	
Total North American Generation Equity Value					1,691	2,218	3,270
Shares Outstanding					659	659	659
Total North American Generation Value Per Share (Non-Listed)					$2.57	$3.37	$4.96
Southland					*$0.85*	*$1.03*	*$1.39*
Warrior Run					*$0.45*	*$0.55*	*$0.75*
Deepwater					*$0.00*	*$0.00*	*$0.00*
Red Oak					*$0.00*	*$0.00*	*$0.00*
Ironwood					*$0.00*	*$0.00*	*$0.00*
Shady Point					*$0.19*	*$0.23*	*$0.31*
Hawaii					*$0.00*	*$0.08*	*$0.22*
Beaver Valley					*$0.00*	*$0.00*	*$0.00*
Puerto Rico					*$0.45*	*$0.67*	*$1.12*
TEG/TEP					*$0.25*	*$0.37*	*$0.60*

Source: Company Filings, FactSet, and UBS Estimates

Figure 15: Summary SOP View for AES

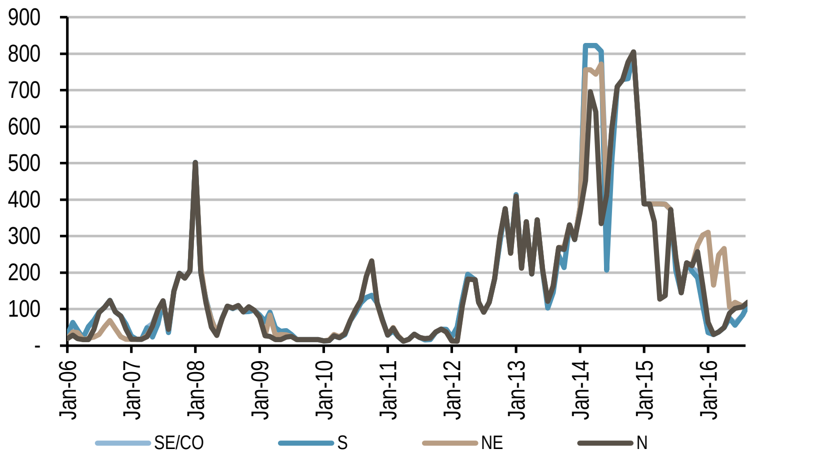
Summary SOP Valuation for AES Corp	% Owned by AES				Low	Base	High
Listed Latin American Subsidiaries					$4.66	$4.66	$4.66
Latin American Utilities (Unlisted)					$0.11	$0.44	$0.67
Latin American Generation (Unlisted)					$2.31	$3.48	$4.67
North American Utilities					$2.27	$2.34	$2.46
North American Generation					$2.18	$2.92	$4.39
Asian Generation					$0.91	$1.26	$1.16
European Generation					$0.94	$1.46	$1.98
Summary SOP Valuation for AES Corp					Low	Base	High
Total Subsidiaries Equity Value					$13.38	$16.55	$19.99
Other Adjustments (Parent Debt, etc)							
Parent Adjusments, Debt, and Corp/Other						(3,805)	
Shares Outstanding						659	
Parent Debt Oustanding and Cost Drag per Share						($5.77)	
AES Corp Total Equity Value per Share					$8	$11	$14
Parent Adjustments, Debt, Etc							
	2016 EBITDA	EV/EBITDA Multiple					
Corp/"Other" businesses (EBITDA)	65	6.0x	7.0x	8.0x	$389	$454	$519
	2017 Net Income						
Equity Investments	35	7.0x	8.0x	9.0x	$245	$280	$315
NPV of NOLs						$197	
Other Non-Recourse Debt (Corp/Other)							
Other Wind Projects, Euro/African Utes, etc						($104)	
Recourse Debt *(using latest reported 10K numbers)*							
Unsecured Notes						($5,015)	
Less Current Maturities						$0	
Secured Debt / Term Loans						$0	
Total Recourse Debt						($5,015)	
Total Cash (incl. Subsidiaries), FY15						$1,262	
Exclude Subsidiary Cash, FY15						($755)	
Net Debt (FY15)						($4,508)	
Parent FCF (mid point of guidance)						$575	
Investment in Subsidiaries						-$330	
Shareholder Dividends						-$290	
Expected Share Buyback						-$79	
Incremental Cash Generation FY15 to FY16						-$124	
Parent Adjusments, Debt, and Corp/Other						(3,805)	
Shares Outstanding (2016e)						659	
Parent Debt Oustanding and Cost Drag						($5.77)	
AES Corp Total Equity Value per Share					$8	$11	$14

Source: Company Filings, FactSet, and UBS Estimates

Brazil Prices Returning to Nominal Levels

We emphasize power prices have returned to modest levels. In contrast to he hydrological concerns of recent years, the latest prospects are concerning as ability to replace hedged power prices are challenged.

Figure 16: Brazilian spot market prices remain volatile (R$/MWh, in real terms)

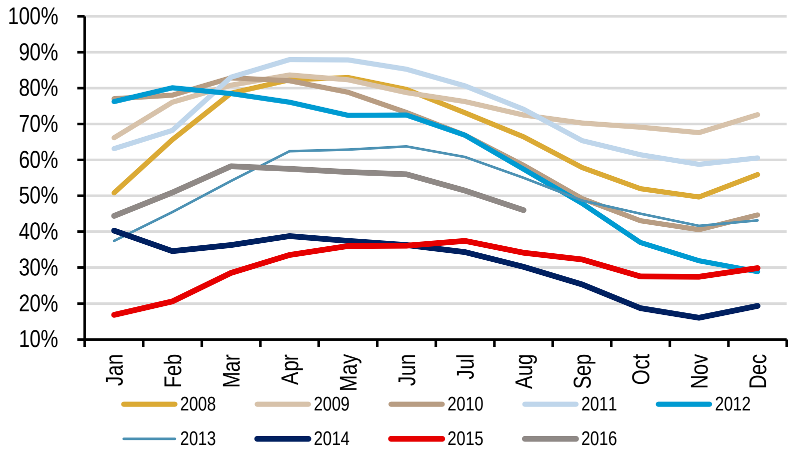


Source: CCEE, UBS

Hydrology Update

Reservoir levels today are better than one year ago but this is due to high level of dispatch of thermoelectricity plants.

Figure 17: Brazil hydrology: reservoir level data

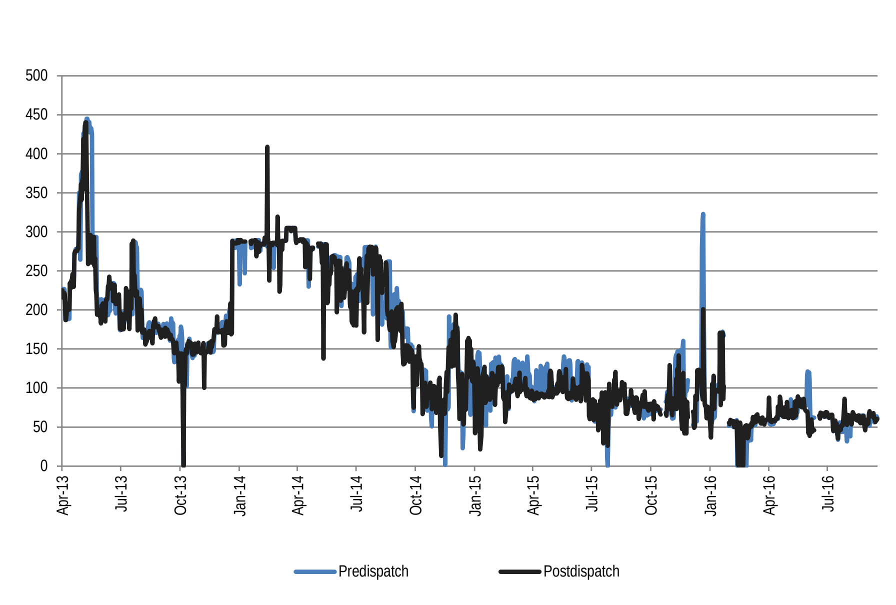


Source: ONS, UBS Brazilian utility team estimates

Panamanian Hydro Disclosures: Remains in Check

Following significant scrutiny in 2013 of hydro levels across Central America, we include recent spot prices following the significant drought conditions experienced recently. We emphasize AES' efforts in the country to add LNG capacity creates a more meaningful exposure to potential added demand should hydrological conditions soften in the future. They remain on track for the time being.

Figure 18: Panama Spot Prices – Pre/Post-Dispatch (Generation MWh per Unit System) – Back at the lows



Source: Company reports

Underlying International Commodity Performance

Following the rally in Rotterdam coal prices, we ask whether the arbitrage with US coal prices is sustainable. With bulk shipping rates among the lowest in 30-years at just ~$6/t for this specific route per our UBS shipping analyst Spiro Dounis, this would appear to provide a clear potential for a demand pick up.

Figure 19: Rotterdam Coal ($/ton), International Coal Proxy

Source: FactSet

Figure 20: NYMEX CAPP Coal ($/ton), Domestic Coal Proxy

Source: FactSet

Comparing the Forward Gas Months: US vs. Europe

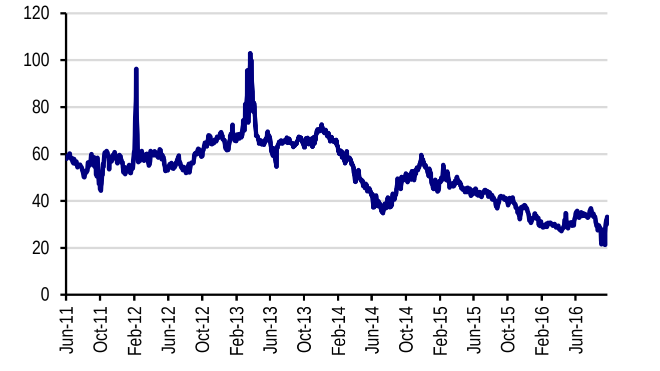
Henry Hub natural gas rose from August '13 lows of ~$3.23/MMBtu to a high of ~$6.15 on February 19th 2014. They have been declining steadily since then, however, 2Q16 observed reversal of gas prices and are trading ~ $3.00 as of now; up -24% on Y-o-Y basis. Meanwhile, European gas prices have experienced

decline of -19% on Y-o-Y. We see reversal of coal to gas switching at prices *at or above* $4.50/MMBtu as meaningfully capping upside to gas demand over the intermediate term.

Figure 21: US Natural Gas (Hub), $/MMBtu Front Month

Source: FactSet

Figure 22: European Natural Gas (NBP), pence/therm



Source: Bloomberg

What about F/X?

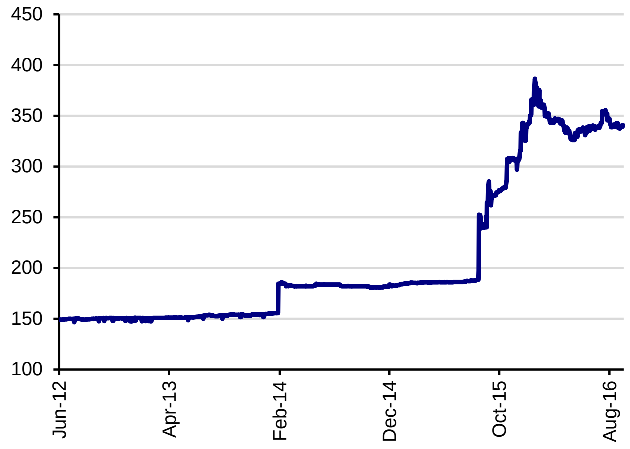
Figure 23: F/X Rate for USD / Brazilian Real

Source: FactSet

Figure 24: F/X Rate for USD / Euro

Source: FactSet

Figure 25: US Dollar per Kazakhstan Tenge



Source: Factset

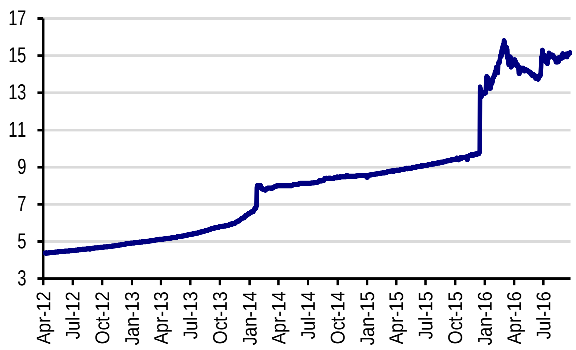
Figure 26: US Dollar per GBP

Source: Factset

Figure 27: US Dollar per Colombian Peso

Source: Factset

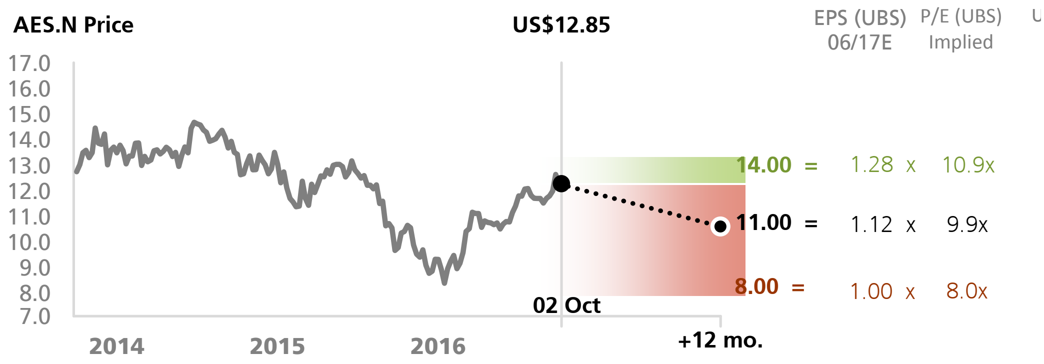
Figure 28: F/X Rate for USD / Argentine Peso



Source: Factset

UPSIDE / DOWNSIDE SPECTRUM

return ↑



Risk to the current share price is heavily skewed (1:-27.3) to the downside

Upside (US$14): Our upside case assumes a premium EV/EBITDA multiple of 8.0x on the LatAm subsidiaries, as well as the continued correlation trade between AES and EM.

Base (US$11): Our base case valuation applies a 6.0x EV/EBITDA multiple on the LatAm Subsidiaries, 7.0x on North American and Asian entities. We apply MtM for AES Gener and price targets for covered subsidiaries (Tiete and Eletropaulo).

Downside (US$8): Our downside valuation assumes a 5.0x EV/EBITDA multiple on LatAm subsidiaries, and a 1 turn discount to our North American and Asian entities at 6.0x.

COMPANY DESCRIPTION

return ↑

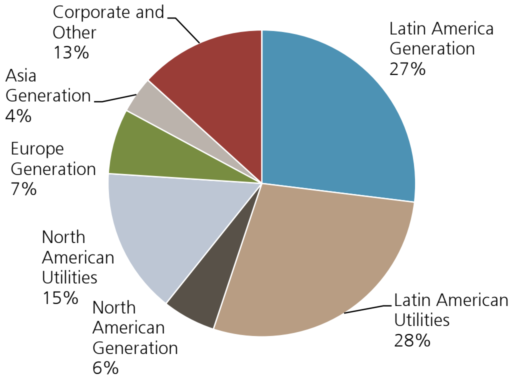
Market Cap	US$26.5bn
Shares Outstanding	477m (COM)
Industry	Industrial, Diversified
Region	Americas
Website	www.eaton.com

AES Corporation is a global power company operating primarily in the US, South America, Europe, and Asia. The company operates in two primary businesses, generation and utilities, with a total proportional generation capacity of approximately 28 GW and distribution networks serving over 10 million customers in the US, Brazil, and MCAC. Adjusted pretax contribution is approximately split between the following geographic regions: US (24%), Andes (19%), Brazil (12%), MCAC (18%), EMEA (19%), and Asia (8%).

Industry outlook

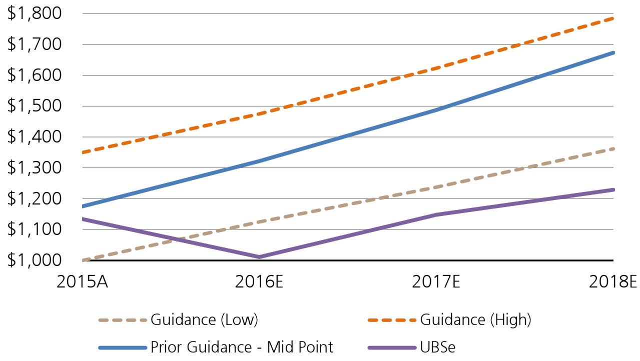
The electric utility industry is projected to experience weak or negative electric demand growth in coming years as a tepid economy and energy efficiency dampen demand. In the unregulated merchant power space, we see limited potential for a meaningful recovery from currently low power prices due to limited 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 with M&A at modest (at best) premiums designed to extract cost synergies. We believe utilities with high parent leverage will disproportionately suffer, as they are unable to recoup from rising interest rates.

Revenues by function (%)



Source: Company Filings and UBSe

EBIT by product segment



Source: Company filings, FactSet and UBSe

AES Corporation (AES.N)

Income statement (US$m)	12/13	12/14	12/15	12/16E	% ch	12/17E	% ch	12/18E	12/19E	12/20E
Revenues	**15,891**	**17,146**	**14,963**	**18,851**	26.0	**19,020**	0.9	**19,204**	**19,384**	**19,427**
Gross profit	3,247	3,088	2,866	3,333	16.3	3,502	5.1	3,686	3,866	3,909
EBITDA (UBS)	**3,814**	**4,396**	**3,482**	**3,943**	13.2	**4,089**	3.7	**4,302**	**4,483**	**4,528**
Depreciation & amortisation	(1,330)	(1,289)	(1,291)	(1,171)	-9.3	(1,173)	0.1	(1,164)	(1,157)	(1,151)
EBIT (UBS)	**2,484**	**3,107**	**2,191**	**2,771**	26.5	**2,917**	5.3	**3,138**	**3,326**	**3,377**
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(1,172)	(1,071)	(1,034)	(1,175)	-13.7	(1,151)	2.1	(1,122)	(1,113)	(1,085)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**1,312**	**2,036**	**1,157**	**1,596**	37.9	**1,766**	10.7	**2,016**	**2,213**	**2,292**
Tax	(343)	(419)	(465)	(499)	-7.4	(554)	-10.9	(634)	(784)	(812)
Profit after tax	**969**	**1,617**	**692**	**1,096**	58.4	**1,212**	10.5	**1,382**	**1,429**	**1,479**
Preference dividends	(35)	(35)	(35)	(35)	-	(35)	-	(35)	(35)	(35)
Minorities	24	(640)	157	(386)	-	(450)	-16.7	(512)	(460)	(478)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**958**	**942**	**814**	**676**	-17.0	**727**	7.6	**836**	**934**	**966**
Net earnings (UBS)	**958**	**942**	**814**	**676**	-17.0	**727**	7.6	**836**	**934**	**966**
Tax rate (%)	26.1	20.6	40.2	31.3	-22.1	31.4	0.2	31.4	35.4	35.5

Per share (US$)	12/13	12/14	12/15	12/16E	% ch	12/17E	% ch	12/18E	12/19E	12/20E
EPS (UBS, diluted)	1.29	1.30	1.22	1.03	-16.0	1.12	8.9	1.30	1.47	1.54
EPS (local GAAP, diluted)	1.29	1.30	1.22	1.03	-16.0	1.12	8.9	1.30	1.47	1.54
EPS (UBS, basic)	1.29	1.31	1.22	1.03	-16.0	1.12	8.9	1.30	1.47	1.54
Net DPS (US$)	0.16	0.25	0.40	0.44	10.0	0.49	11.4	0.54	0.59	0.64
Cash EPS (UBS, diluted)[1]	3.07	3.08	3.16	2.80	-11.2	2.92	4.1	3.11	3.29	3.37
Book value per share	5.77	5.99	4.68	5.24	12.1	5.81	10.8	6.52	7.36	8.23
Average shares (diluted)	745.00	724.00	666.81	658.91	-1.2	651.01	-1.2	643.11	635.21	627.31

Balance sheet (US$m)	12/13	12/14	12/15	12/16E	% ch	12/17E	% ch	12/18E	12/19E	12/20E
Cash and equivalents	1,642	1,539	1,262	888	-29.6	798	-10.2	807	1,821	1,831
Other current assets	6,097	6,287	5,604	6,438	14.9	6,465	0.4	6,496	6,526	6,533
Total current assets	**7,739**	**7,826**	**6,866**	**7,325**	6.7	**7,263**	-0.9	**7,303**	**8,346**	**8,364**
Net tangible fixed assets	25,112	25,151	22,816	22,841	0.1	22,673	-0.7	22,545	22,413	22,295
Net intangible fixed assets	1,622	1,458	1,157	1,157	0.0	1,157	0.0	1,157	1,157	1,157
Investments / other assets	5,938	4,531	6,011	5,611	-6.7	5,611	0.0	5,611	5,611	5,611
Total assets	**40,411**	**38,966**	**36,850**	**36,934**	0.2	**36,704**	-0.6	**36,615**	**37,528**	**37,426**
Trade payables & other ST liabilities	5,473	4,864	4,421	4,868	10.1	4,888	0.4	4,909	4,929	4,934
Short term debt	2,180	2,133	2,529	2,227	-11.96	2,130	-4.32	2,041	2,047	1,944
Total current liabilities	**7,653**	**6,997**	**6,950**	**7,095**	2.1	**7,018**	-1.1	**6,949**	**6,977**	**6,879**
Long term debt	18,869	18,725	18,278	17,545	-4.0	16,764	-4.5	16,035	16,091	15,253
Other long term liabilities	6,160	5,841	4,913	5,278	7.4	5,578	5.7	5,877	6,226	6,574
Preferred shares	78	78	538	538	0.00	538	0.00	538	538	538
Total liabilities (incl pref shares)	**32,760**	**31,641**	**30,679**	**30,456**	-0.7	**29,898**	-1.8	**29,399**	**29,831**	**29,244**
Common s/h equity	4,330	4,272	3,149	3,456	9.7	3,785	9.5	4,194	4,674	5,160
Minority interests	3,321	3,053	3,022	3,022	0.0	3,022	0.0	3,022	3,022	3,022
Total liabilities & equity	**40,411**	**38,966**	**36,850**	**36,934**	0.2	**36,704**	-0.6	**36,615**	**37,528**	**37,426**

Cash flow (US$m)	12/13	12/14	12/15	12/16E	% ch	12/17E	% ch	12/18E	12/19E	12/20E
Net income (before pref divs)	993	977	849	711	-16.3	762	7.2	870	969	1,001
Depreciation & amortisation	1,330	1,289	1,291	1,171	-9.3	1,173	0.1	1,164	1,157	1,151
Net change in working capital	(76)	(1,022)	(437)	(386)	11.6	(8)	97.8	(9)	(9)	(2)
Other operating	946	421	665	65	-90.2	0	-	(1)	49	49
Operating cash flow	**3,193**	**1,665**	**2,368**	**1,561**	-34.1	**1,926**	23.4	**2,024**	**2,166**	**2,199**
Tangible capital expenditure	(1,988)	(2,016)	(2,308)	(880)	61.9	(850)	3.4	(850)	(850)	(850)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	225	1,117	121	915	NM	1,015	10.9	1,015	0	0
Other investing	(11)	243	(179)	0	-	0	-	0	0	0
Investing cash flow	**(1,774)**	**(656)**	**(2,366)**	**35**	-	**165**	371.4	**165**	**(850)**	**(850)**
Equity dividends paid	(118)	(181)	(267)	(290)	-8.7	(319)	-10.0	(347)	(375)	(401)
Share issues / (buybacks)	(322)	(308)	(482)	(79)	83.6	(79)	0.0	(79)	(79)	(79)
Other financing	(1,135)	(953)	133	(35)	-	(35)	0.00	(35)	(35)	(35)
Change in debt & pref shares	405	108	618	(1,950)	-	(1,893)	2.92	(1,833)	63	(941)
Financing cash flow	**(1,170)**	**(1,334)**	**2**	**(2,354)**	-	**(2,326)**	1.2	**(2,295)**	**(426)**	**(1,456)**
Cash flow inc/(dec) in cash	**250**	**(325)**	**5**	**(758)**	-	**(235)**	69.0	**(106)**	**891**	**(108)**
FX / non cash items	(578)	222	(282)	384	-	145	-62.3	115	124	118
Balance sheet inc/(dec) in cash	**(328)**	**(103)**	**(277)**	**(374)**	-35.0	**(90)**	75.8	**9**	**1,014**	**10**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

AES Corporation (AES.N)

Valuation (x)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
P/E (local GAAP, diluted)	10.0	11.0	9.8	12.5	11.5	9.9	8.7	8.3
P/E (UBS, diluted)	10.0	11.0	9.8	12.5	11.5	9.9	8.7	8.3
P/CEPS	4.2	4.6	3.8	4.6	4.4	4.1	3.9	3.8
Equity FCF (UBS) yield %	12.5	(3.4)	0.7	8.0	12.7	13.8	15.5	15.9
Net dividend yield (%)	1.2	1.8	3.3	3.4	3.8	4.2	4.6	5.0
P/BV x	2.2	2.4	2.6	2.4	2.2	2.0	1.7	1.6
EV/revenues (core)	1.9	1.8	1.9	1.5	1.6	1.5	1.5	1.5
EV/EBITDA (core)	7.8	7.1	8.3	7.3	7.2	6.9	6.6	6.6
EV/EBIT (core)	12.0	10.0	13.2	10.4	10.2	9.5	8.9	8.8
EV/OpFCF (core)	9.5	8.3	10.2	8.7	8.5	8.0	7.6	7.6
EV/op. invested capital	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2

Enterprise value (US$m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Market cap.	9,607	10,385	8,344	8,478	8,478	8,478	8,478	8,478
Net debt (cash)	19,483	19,441	19,740	19,740	19,740	19,740	19,740	19,740
Buy out of minorities	437	387	456	421	485	547	495	513
Pension provisions/other	1,310	1,342	927	927	927	927	927	927
Total enterprise value	**30,837**	**31,555**	**29,467**	**29,565**	**29,630**	**29,691**	**29,639**	**29,657**
Non core assets	(1,010)	(537)	(610)	(610)	0	0	0	0
Core enterprise value	**29,827**	**31,018**	**28,857**	**28,955**	**29,630**	**29,691**	**29,639**	**29,657**

Growth (%)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Revenue	-17.4	7.9	-12.7	26.0	0.9	1.0	0.9	0.2
EBITDA (UBS)	33.5	15.3	-20.8	13.2	3.7	5.2	4.2	1.0
EBIT (UBS)	61.6	25.1	-29.5	26.5	5.3	7.6	6.0	1.5
EPS (UBS, diluted)	3.3	1.2	-6.1	-16.0	8.9	16.4	13.2	4.8
Net DPS	0.0	58.3	60.0	10.0	11.4	10.2	9.3	8.5

Margins & Profitability (%)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Gross profit margin	20.4	18.0	19.2	17.7	18.4	19.2	19.9	20.1
EBITDA margin	24.0	25.6	23.3	20.9	21.5	22.4	23.1	23.3
EBIT margin	15.6	18.1	14.6	14.7	15.3	16.3	17.2	17.4
Net earnings (UBS) margin	6.0	5.5	5.4	3.6	3.8	4.4	4.8	5.0
ROIC (EBIT)	8.9	11.3	8.1	10.5	11.2	12.3	13.2	13.7
ROIC post tax	6.6	9.0	4.8	7.2	7.7	8.4	8.6	8.8
ROE (UBS)	21.5	21.9	21.9	20.5	20.1	20.9	21.1	19.7

Capital structure & Coverage (x)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Net debt / EBITDA	5.1	4.4	5.8	4.9	4.6	4.1	3.8	3.5
Net debt / total equity %	254.7	264.8	NM	299.8	273.8	246.8	219.0	194.4
Net debt / (net debt + total equity) %	71.8	72.6	76.5	75.0	73.2	71.2	68.7	66.0
Net debt/EV %	65.3	62.5	69.6	67.1	62.9	60.0	56.9	53.6
Capex / depreciation %	149.4	156.4	178.7	75.1	72.5	73.0	73.4	73.9
Capex / revenue %	12.5	11.8	15.4	4.7	4.5	4.4	4.4	4.4
EBIT / net interest	2.1	2.9	2.1	2.4	2.5	2.8	3.0	3.1
Dividend cover (UBS)	8.1	5.2	3.1	2.3	2.3	2.4	2.5	2.4
Div. payout ratio (UBS) %	12.3	19.1	32.8	42.9	43.9	41.6	40.1	41.5

Revenues by division (US$m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Others	15,891	17,146	14,963	18,851	19,020	19,204	19,384	19,427
Total	**15,891**	**17,146**	**14,963**	**18,851**	**19,020**	**19,204**	**19,384**	**19,427**

EBIT (UBS) by division (US$m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Others	2,484	3,107	2,191	2,771	2,917	3,138	3,326	3,377
Total	**2,484**	**3,107**	**2,191**	**2,771**	**2,917**	**3,138**	**3,326**	**3,377**

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

Forecast returns

Forecast price appreciation	-14.4%
Forecast dividend yield	3.6%
Forecast stock return	-10.8%
Market return assumption	5.8%
Forecast excess return	-16.6%

Valuation Method and Risk Statement

Risks for AES Corp (AES) include but are not limited to: (1) potential changes in commodity prices [natural gas, power, etc.]; (2) unfavorable weather and precipitation; (3) adverse political/legal/regulatory actions; (4) economic downturn in its regulated service territories and other markets; (5) changes in interest and foreign currency exchange rates; (6) social and political instability; (7) changes in capital spending requirements; (8) inability to complete pending or prospective M&A transactions; (9) natural disasters; (10) operational challenges; (11) inability to achieve its cost reduction and other financial targets; (12) inability to meet debt obligations as due; and (13) other unforeseen changes.

Valuations are based on a sum-of-the-parts analysis.

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UBS Investment Research: Global Equity Rating Definitions

12-Month Rating	Definition	Coverage[1]	IB Services[2]
Buy	FSR is > 6% above the MRA.	47%	32%
Neutral	FSR is between -6% and 6% of the MRA.	38%	25%
Sell	FSR is > 6% below the MRA.	15%	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.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 30 June 2016.
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.
3:Percentage of companies under coverage globally within the Short-Term rating category.
4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

KEY DEFINITIONS: Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

EXCEPTIONS AND SPECIAL CASES: UK and European Investment Fund ratings and definitions are: Buy: Positive on factors such as structure, management, performance record, discount; **Neutral:** Neutral on factors such as structure, management, performance record, discount; **Sell:** Negative on factors such as structure, management, performance record, discount. **Core Banding Exceptions (CBE):** Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Company Disclosures table in the relevant research piece.

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UBS Securities LLC: Julien Dumoulin-Smith; Jerimiah Booream, CFA. **UBS Brasil CCTVM S.A.:** Marcelo Sa.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
AES Corporation[16]	AES.N	Neutral (UR)	N/A	US$12.85	30 Sep 2016
AES TIETE	TIET11.SA	Neutral	N/A	R$16.01	30 Sep 2016
ELETROPAULO[20]	ELPL4.SA	Sell (CBE)	N/A	R$10.61	30 Sep 2016

Source: UBS. All prices as of local market close.
Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

16. UBS Securities LLC makes a market in the securities and/or ADRs of this company.
20. Because this security exhibits higher-than-average volatility, the FSR has been set at 15% above the MRA for a Buy rating, and at -15% below the MRA for a Sell rating (compared with 6/-6% under the normal rating system).

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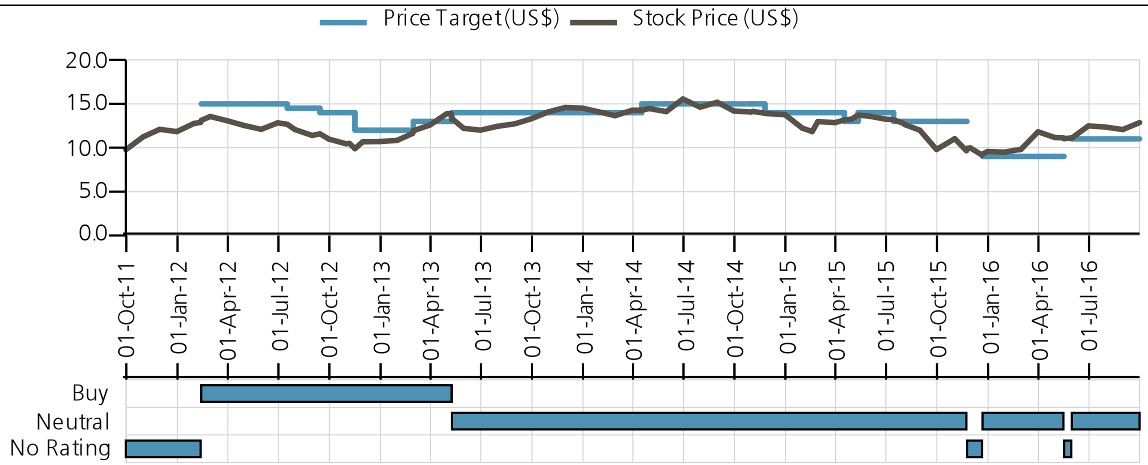
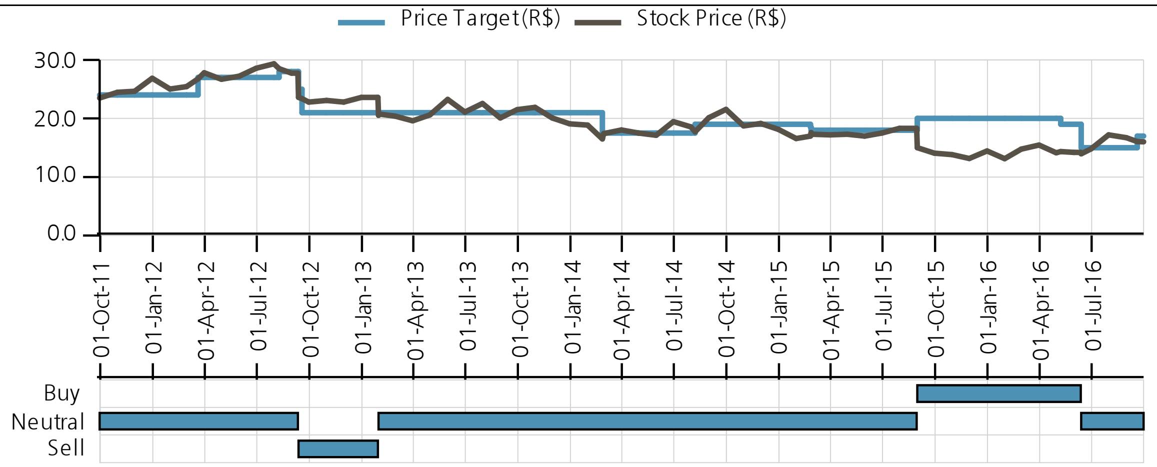
AES Corporation (US$)



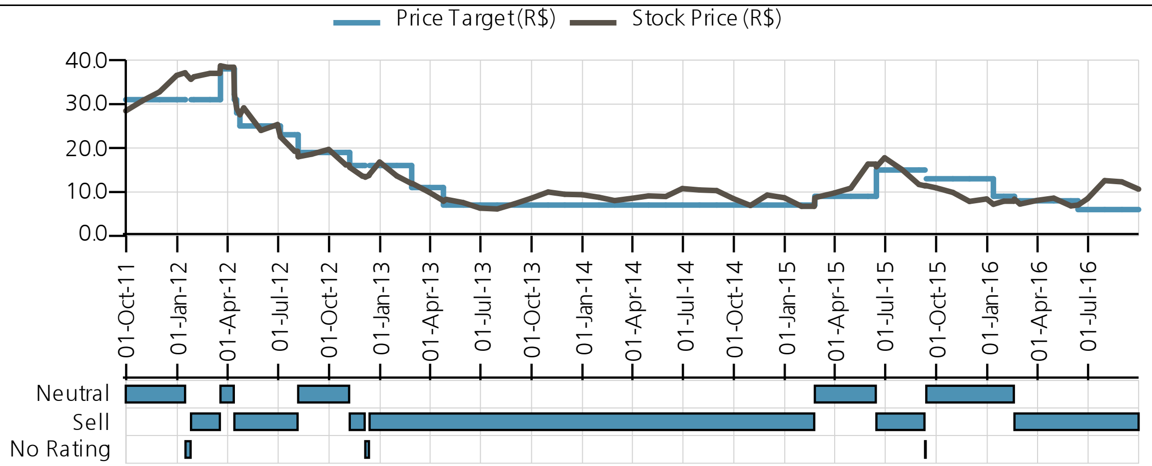
Source: UBS; as of 30 Sep 2016

AES TIETE (R$)



Source: UBS; as of 30 Sep 2016

ELETROPAULO (R$)



Source: UBS; as of 30 Sep 2016

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