Duke Energy

Brighter Setup for 2016, Upgrade to Buy

Equities

Americas
Electric Utilities

12-month rating	**Buy**
	Prior: Neutral
12m price target	**US$76.00**
	Prior: US$71.00
Price	**US$69.81**

RIC: DUK.N **BBG:** DUK US

Trading data and key metrics

52-wk range	US$89.36-65.83
Market cap.	US$48.1bn
Shares o/s	688m (COM)
Free float	97%
Avg. daily volume ('000)	1,119
Avg. daily value (m)	US$78.3
Common s/h equity (12/15E)	US$40.3bn
P/BV (12/15E)	1.2x
Net debt / EBITDA (12/15E)	4.2x

EPS (UBS, diluted) (US$)

	12/15E			
	From	To	% ch	Cons.
Q1	1.24	1.24	0	1.24
Q2	0.95	0.95	0	0.95
Q3	1.36	1.47	8	1.47
Q4E	1.01	0.91	-9	0.93
12/15E	4.59	4.60	0	4.58
12/16E	4.65	4.65	0	4.71
12/17E	4.86	4.88	1	4.95

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U/G to Buy on likely sale of Brazilian Hydro after strong underperformance

DUK now trades at a historically low forward P/E discount to regulated peers of nearly 7%-8% following 7% underperformance this year in the face of continued poor Brazilian hydro asset performance and a significant ~$0.35 (-7%) reduction to long-term guidance (see below). Recent commentary from mgmt as well as AES now lead us to believe that DUK could be preparing to sell its 2 GW Brazilian portfolio, with discussion of its intentions possible as early as the Feb earnings call. As such, we see the discount to peers as unsustainable, with shares more likely to outperform heading into 2016 as it joins the ranks of PPL and AEP to re-rate back to a 'pure play'.

Low bar for guidance sets up nicely for 2016

For 2016, management now expects only the remaining core regulated and commercial businesses to grow 4%-6% into 2016 from 2015E guidance of $4.13. In combination with flat International expectations of only $0.30 for 2016 (vs $0.60 in 2014), this implies a flattish ~$4.65 for 2016, although we don't expect formal explicit 2016 guidance until February. Any recovery in Brazil could result in up to ~$0.15 of upside (watching rainy season Nov-April). DUK also rebased its long-term 4%-6% EPS CAGR guidance off 2016 vs the previous 2013 $4.33 base, effectively reducing long term expectations by -$0.35 (-7%). Our ests were reduced last month and remain mostly unchanged. While a sale of the Brazilian hydro assets could be -$0.10 dilutive, this should be offset by ~$0.10 accretion from the recent PNY acquisition announcement.

Piedmont acquisition largely a defensive maneuver; closing year-end 2016

On the Piedmont acquisition, DUK acknowledged that they "reached" for the deal, but point to the need to prevent another large regional utility from stepping into their territory as well as growth opportunities for both midstream and dist level assets.

Valuation: Raise PT $5 for higher peer P/E; u/g to Buy on valuation, lower risk

We upgrade our rating from Neutral to Buy. Our valuation is based on a 2017 P/E. With the pending Piedmont transaction and a higher likelihood for a sale of Brazil assets, DUK appears poised to permanently reduce its non-regulated exposure and volatility in 2016. Accordingly, we are updating our valuation to 15.5x from 14.7x in Nov to match the peer avg, which is responsible for most of the change in PT (plus another $0.30 for tweaking our ests +$0.02).

Highlights (US$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Revenues	19,624	24,598	23,925	24,484	25,118	25,751	26,214	26,813
EBIT (UBS)	5,026	5,885	6,511	6,359	6,517	6,833	7,161	7,497
Net earnings (UBS)	2,480	3,067	3,214	3,190	3,184	3,345	3,513	3,692
EPS (UBS, diluted) (US$)	4.32	4.35	4.55	4.60	4.65	4.88	5.13	5.39
DPS (US$)	3.03	3.09	3.16	3.28	3.39	3.54	3.69	3.94
Net (debt) / cash	(38,875)	(39,594)	(40,498)	(39,481)	(42,078)	(44,219)	(46,299)	(47,898)

Profitability/valuation	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
EBIT margin %	25.6	23.9	27.2	26.0	25.9	26.5	27.3	28.0
ROIC (EBIT) %	10.8	9.5	10.7	11.0	11.1	11.0	11.0	11.0
EV/EBITDA (core) x	9.0	10.1	9.6	9.3	9.0	6.7	6.4	6.1
P/E (UBS, diluted) x	14.9	16.0	16.2	15.2	15.0	14.3	13.6	12.9
Equity FCF (UBS) yield %	(3.2)	0.4	0.0	0.4	(4.2)	0.0	0.4	1.9
Net dividend yield %	4.7	4.5	4.3	4.7	4.9	5.1	5.3	5.6

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$69.81 on 21 Dec 2015 18:41 EST

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

PIVOTAL QUESTIONS

Q: Will DUK sell is troubled Brazilian hydroelectric plants?

Duke has continued weighing its options, with mgmt more outspoken of late on the incongruity of holding volatile earnings from its Brazilian portfolio, alongside its largely regulated utility portfolio. Results from 2015 have proven to be more volatile than desired, and management now expects this volatility to continue. The volatility has made holding the assets expensive, not least of which from a cost of capital perspective. We see dilution from a potential sale of -$0.10. more →

Q: Will the company successfully execute on its "reach" acquisition of Piedmont Natural Gas?

We expect the recently announced acquisition of Piedmont Natural Gas to be about $0.10 accretive in 2017+, adding about 50 bps to the EPS CAGR, albeit at a notably high premium paid that limits the accretion beyond the $0.10. The deal is expected to close by year end. more →

UBS VIEW

Core domestic earnings growth looks solid while International exposure poised to decline: As management continues to make progress on past controversies, such as Edwardsport and coal ash remediation, we see the historically wide ~7%-8% discount versus peers as contracting with the possibility of a Brazilian divestiture as well as the pending acquisition of regulated utility Piedmont Natural Gas as catalysts to further improve the risk profile. Going forward we see DUK concentrating more on domestic opportunities to expand its regulated and commercial renewable investments as well as growth from both gas transportation and distribution infrastructure.

EVIDENCE

Analysis of potential Brazilian dilution is lower than expected: Management commentary at the EEI conference in Nov was unambiguously descriptive of Brazilian volatility as "undesirable" and "too expensive". Since then, we see AES and others as increasingly interested in the portfolio as well. Of the drop in International earnings from $0.60 in 2014 to a projected $0.30 in 2015, about -0.06 is Brazil drought-related with another -0.08 from Latin American currency deterioration and -0.08 from lower MTBE pricing correlated to Brent crude. The company also benefited in 2014 from a 1x +$0.07 tax benefit in Chile. With lower earnings from Brazil expected for 2015/16, we see dilution from a potential sale as reduced to about -$0.10 (vs as much as -$0.20 dilution under stronger earnings scenarios), much of which could be offset by modest accretion from the Piedmont deal.

WHAT'S PRICED IN?

We think investors are not giving credit yet for a Brazil sale and have viewed Piedmont negatively: We embed neither the sale of Brazil nor the Piedmont transaction into our ests and PT (the combination of both is likely earnings neutral but would enhance the regulated risk profile overall). At the current 7%-8% discount to regulated peers, we don't think that the market is yet embedding a Brazilian sale in shares. Furthermore, we view investors' initial negative reaction to the 27x P/E paid for Piedmont likely does not take full account of the transaction's benefits as a risk enhancement, opportunities for gas infrastructure growth, and a defensive move against other possible bidders seeking to encroach on DUK's home state.

UPSIDE / DOWNSIDE SPECTRUM

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COMPANY DESCRIPTION

Duke Energy (Duke), based in Charlotte, North Carolina, is the largest US electric power holding company with over $100bn in assets, which generates, transmits, and distributes electricity to over seven million customers in the Carolinas, Kentucky, Indiana, Ohio, and Florida.

For additional context, please refer links to relevant recent reports below:

11/8/15 A Samba Reset
8/26/15 The Duke of North Carolina
8/10/15 Targeting a Samba Surprise
5/5/15 Even More Cash Coming
2/26/15 Cashing in and Beefing Up
1/5/15 More Than Just an Oil Slick
11/6/14 Put Up Your Dukes

Upgrade to Buy after underperformance and low guidance bar setup into 2016

With shares trading at a historically low 7%-8% discount to the regulated peers on '17E, many investors ask if now is the time to accumulate. With earnings guidance now rebased to a more realistic and significantly lower 2016 base, the key questions into 4Q earnings will be proving out confidence in 4-6% EPS growth at the core utilities segment, execution of the pending merger with Piedmont, and value-creating redeployment of cash proceeds from various asset sales and the securitization of Crystal River 3.

We're returning to a Buy rating following a substantial re-rating in the interim. We think the analogy of DUK to peers like PPL and AEP in re-rating on the back of a move to a more fully regulated profile could yet entice value investors.

We see the potential sale of its International portfolio, most notably its Brazilian hydro portfolio as exceptionally likely following years of indecision on what to do about the earnings volatility in its International segment. We also note several positive items, including the earlier-than-expected sale of Midwest Genco (and better-than-expected 1Q results there) along with the much earlier-than-expected closing of the NCEMPA asset purchase, each of which should help DUK keep with its 2015 guidance range of $4.55-$4.65 and implied early indication of ~$4.65 for 2016. As we highlight in our earnings table below, we remain below consensus from 2016E-2019E and assume a 5.1% EPS CAGR, which includes continued poor results from the International segment through the forecast period.

We expect the recent acquisition announcement for Piedmont Natural Gas to be about $0.10 accretive in 2017+, adding about 50 bps to the EPS CAGR, albeit at a notably high premium paid that limits the accretion beyond the $0.10. Moreover, with the PNY deal behind the company and estimates reset, we're less concerned of any future utility acquisitions (with big premiums paid). Management did not specify within its confidence range whether the core EPS growth excludes this acquisition (presumably PNY accretion is reflected within range of EPS uplift). This accretion should offset the -$0.10 of dilution we could see from the sale of Brazilian hydro assets, excluding any synergies if sold to an adjacent portfolio. While it is likely to still hold onto the NMC portfolio in Saudi Arabia for the time being, we wouldn't doubt the latest strategy to result in a ultimate sale here too. Bottom line, the international review is likely to come to its logical conclusion to divest with shares clearly weighed down from this adulteration in the multiple.

PIVOTAL QUESTIONS

return ↑

Q: Will DUK sell its troubled Brazilian hydroelectric plants?

Duke has continued weighing its options, with mgmt more outspoken of late on the incongruity of holding volatile earnings from its Brazilian portfolio, alongside its largely regulated utility portfolio. At the EEI conference in November, some poignant observations were made: while Brazilian hydroelectric and National Methanol had performed well for fifteen years prior to the more recent drought conditions and collapse of Brent crude, the solution out of the 2014 strategic review was to harvest cash while holding on for a recovery in poor exogenous conditions. However, results from 2015 have proven to be more volatile than desired, and management now expects this volatility to continue going forward. Furthermore, the volatility has made holding the assets too expensive, not least of which from a cost of capital perspective. Of the drop from $0.60 in 2014 to a projected $0.30 in 2015, about -0.06 is Brazil drought-related with another -0.08 from Latin American currency deterioration and -0.08 from lower MTBE pricing correlated to Brent crude. The company also benefited in 2014 from a 1x +$0.07 tax benefit in Chile. With lower earnings from Brazil expected for 2015/16, we see dilution from the sale of about -$0.10, although believe a sale price could be benefit from synergies. Further we believe Peruvian assets could garner a higher multiple, upwards of ~8x, although believe *just* the Brazilian assest will be on the table in the initial divestment process.

Results for 2015 have proven to be more volatile than desired, and management now expects this volatility to continue going forward. Furthermore, the volatility has made holding the assets too expensive.

Figure 1: Breakdown of International Segment EPS

International breakdown	2013	2014	2015E	2016E
Brazil	0.32	0.23	0.12	0.13
National Methanol	0.16	0.17	0.09	0.09
Peru	0.10	0.11	0.08	0.08
Chile	-	0.05	-	-
Other	0.02	0.04	0.01	0.01
Total	$0.60	$0.61	$0.30	$0.31

International breakdown	2014	2014	2015E	2016E
Brazil	54%	38%	40%	42%
National Methanol	27%	28%	31%	30%
Peru	16%	18%	26%	25%
Chile	0%	9%	0%	0%
Other	3%	7%	3%	3%

Source: UBS estimates, Company filings

Figure 2: Dilution from Hypothetical Sale of Brazil Hydro

Sale of Brazilian Hydro		
MWs	$	2,089
Value/kW ($)		750
EV ($M)	$	1,567
FCF ($M UBSe)	$	120
EV/FCF (UBSe)		6x
EV ($M)	$	720
Tax status ($M)		
Historical earnings with taxes paid or deferred	$	2,700
Repatriated portion by yearend 2016 (UBSe)		1,700
Remaining not repatriated at time of sale		1,000
Brazil ~38% proportion of "non-taxable" earnings		380
Estimated sale proceeds		
Assumed sale proceeds ($M UBSe)	$	720
Minus non-taxable (accelerate foreign tax credits)		380
Taxable portion of proceeds		340
Basis - low, so assume 20% of EV		144
Taxes		(55)
After-tax proceeds	$	665
Brazil debt paydown	$	(347)
After-tax cash proceeds	$	318
Loss of EPS	$	(0.13)
Share repo @ $70	$	0.03
Accretion (dilution)	$	(0.10)

Source: UBS estimates, Company filings

Could AES take these assets? We think AES could deploy its remaining ~$500 Mn at AES Tiete of debt capacity as part of any acquisition of Duke's LatAm assets. We suspect this releveraging of the subsidiary could prove particularly accretive, with assets trading at 5-6x EBITDA (pre-synergies, of which mgmt. appears keen to suggest there will readily be). *For further information on AES and the potential of a deal, please see our corresponding note with additional on its Tiete portfolio and background on the combined portfolio.*

Low tax basis in Brazil, but prepaid taxes help

Recall that DUK announced in Feb 2015 its intention to retain the international segment and repatriate $2.7B of historic earnings that had accumulated in Brazilian banks over the years. To accomplish this, DUK paid $373M upfront to use some foreign tax credits (and defer others) on the entire $2.7B. The company also set up the repatriation as repayment of a note to the parent that matures in 2022 (likely to be repaid earlier), with the first slug of $1.2B repatriated in June 2015. We expect another couple of hundred $M by yearend, followed by ~$300M/yr as the businesses generate free cash flow (perhaps somewhat less as hydro conditions remain strained).

As a result of basis distributions over the years (return of capital), the tax basis of the Brazilian assets is fairly low, albeit undisclosed. We've assumed 20% of the proceeds in our hypothetical sale calculation table above. However, any gains taxes from a sale of international assets would be partially offset by the acceleration of deferred foreign tax credits on the remaining non-repatriated cash (pro-rata if only the Brazilian hydro is sold, as we show in the table). For example, if a sale happens by yearend 2016, we expect ~$1.7B of the $2.7B repatriation to be finished, leaving $1B to be repatriated with no additional taxes after acceleration of foreign tax credits. Of this $1B, we assume that about 38% came from the Brazilian assets (the proportion of earnings in 2014), or about $380M. Any gain on the sale of Brazil would be reduced by this $380M for the purpose of calculating tax (we assume 28%).

Are we at a low in international?

Although DUK's hold on the International business appears to be loosening due to sheer volatility, we do note that with forward guidance essentially set at 2015's low levels, the company could stand to benefit from a recovery of any combination of reservoir levels, currency, and/or oil prices. That said our colleague, Lily Yang takes a new angle suggesting near-term pressure and longer-term recovery. On hedging, DUK does not hedge FX risk (too expensive) and while the % of offtake contracts in Brazil has been reduced somewhat to mitigate drought-driven purchased power costs, we view DUK would still benefit substantially from increased rainfall. With a more stable 3Q, rainy season just starting now (Nov-April), and an El Nino weather pattern that could help, we expect to know more in the coming months. We would note, however, that the rise of interest rates in the US next year does not bode well for FX exposure.

Figure 3: Duke Energy International Generating Assets, Dec 2014

Facility	Primary Fuel	Location	Total MW Capacity	Owned MW	Ownership Interest %
DEI Brazil	Water	Brazil	2,274	2,089	92
Egenor	Water	Peru	357	357	100
Cerros	Water / Gas	Argentina	576	524	91
DEI Chile	Water / Diesel	Chile	362	362	100
DEI El Salvador	Oil / Diesel	El Salvador	324	293	90
DEI Guatemala	Oil / Diesel / Coal	Guatemala	361	361	100
Electroquil	Diesel	Ecuador	192	163	85
Aguaytia	Gas	Peru	192	192	100
Total			**4,638**	**4,341**	

Source: Company filings

PIVOTAL QUESTIONS

return ↑

Q: Will the company successfully execute on its "reach" acquisition of Piedmont Natural Gas?

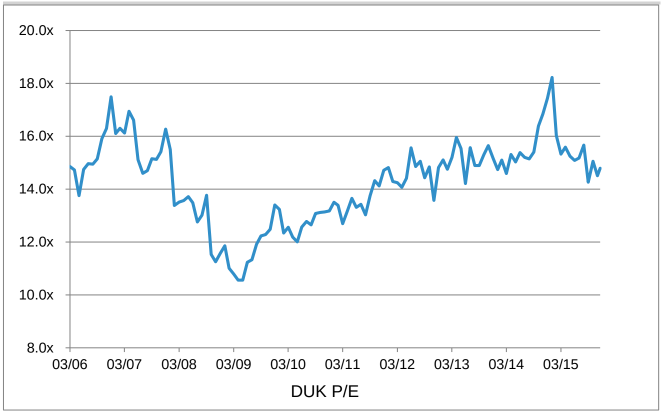
The acquisition of Piedmont Natural Gas is not expected to close until the end of 2016 and is not a factor in either 2016 guidance or the long-term CAGR. We calculate that the deal is accretive by about ~$0.10 and adds ~50 bps to the long-term EPS CAGR. On the Piedmont acquisition, DUK acknowledged that they "reached" for the deal (at 27x P/E), but point to growth opportunities for both midstream and distribution level assets as a compelling strategic rationale. With FERC approvals for the Atlantic Coast Pipeline (ACP) still pending late-2016 (Environmental Impact Statement in early 2016), it's too early to discuss expansion here, but in any event, possible incremental midstream in the Carolinas is a consideration. Furthermore, the company is also eyeing possible strategic cross-selling of gas services within its electric territory (and vice versa) as a growth opportunity, something we heard from SO as well regarding its acquisition of AGL. This might include the expansion of gas service into current wholesale electric muni and coop customers. *See below for additional detail on the deal*.

Valuation: Raise PT $5 to $76 on higher peer P/E

As illustrated in the chart below, DUK is now trading at a historically low 7%-8% discount vs regulated peers after a rough decade that has included missteps with the Edwardsport IGCC, earlier uncertainty over coal ash treatment, two years of harsh drought conditions in Brazil, and a precipitous drop in oil and MBTE pricing. We now see many of these issues in the rear view mirror, with the sale of Brazil assets as increasingly likely to happen. In conjunction with the pending Piedmont transaction, DUK appears poised to permanently reduce its non-regulated exposure and volatility in 2016. All of these improvements, along with a low guidance reset in November lead us to the conclusion that the current historic discount vs peers is unsustainable. **Hence we are upgrading to Buy** while bringing our PT up to match peer averages to a 15.5x 2017E P/E multiple from the previous 14.7x we had applied to the group in November.

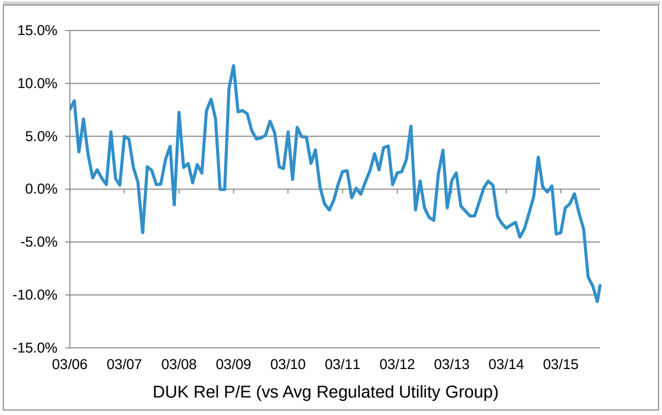
All of these improvements, along with a low guidance reset in November lead us to the conclusion that the current historic discount vs peers is unsustainable.

Figure 4: DUK 2-Year Forward P/E, 2006-2015



Source: UBS Estimates, FactSet

Figure 5: DUK 2-Year Forward P/E Relative to Regulated Peers (% Premium/Discount), 2006-2015



Source: UBS Estimates, FactSet

Our valuation is based on a 2017 P/E methodology with an in-line multiple versus utility peers. Our PT comes up $4.50 for a 5.5% higher peer P/E in the last month and another $0.30 for slightly higher estimates.

Figure 6: DUK P/E Valuation

Duke Energy Valuation: P/E Derived on 2017 EPS					
Downside Case		**Base Case**		**Upside Case**	
2017 EPS	$4.88	2017 EPS	$4.88	2017 EPS	$4.88
P/E Multiple	14.5x	P/E Multiple	15.5x	P/E Multiple	16.5x
Premium/(Discount)	-5%	Premium/(Disc	0%	Premium/(Disc(	5.0%
Value	**$67.00**	**Value**	**$76.00**	**Value**	**$85.00**

Source: Company Filings, FactSet, and UBS Estimates

Opportunities for DUK to execute on its 4%-6% Domestic EPS growth strategy

- **Duke Energy extending review process for Foothills transmission project (Western Carolinas Modernization Project):** On October 8th Duke announced that it was delaying its announced $1.1B Western Carolinas Modernization Project which was announced in May due to more than expected pushback from local property owners. After receiving extensive feedback from stakeholders, the company will retire and replace the 376 MW Asheville coal plant in NC with the construction of two 280 MW CCGTs in 2020 with the option for a 190 MW simple cycle unit by 2023. Total investment remains just over $1B. By comparison, the original plan had included a larger 650 MW natural gas-fired power plant (~$750mn); a transmission substation near Campobello, SC, and a 40-mile, 230 kV line (~$320mn). "Most" of this capex is incremental to DUK's February 5-year capital plan that called for $41.75B of total capex from 2015E-2019E, including $2.95B of "discretionary" spend (a minority portion is considered part of the discretionary bucket). We believe this could add as much as $0.05-$0.08 EPS incremental to prior expectations by 2019 if approved. It remains to be seen how the potential revisions to the project will impact the ultimate cost.

Duke forecasts 0.5%-1.0% annual demand growth in the region and sees adding new capacity as a necessity.

- **New transmission plan filed for Indiana:** In December, DUK filed a new $1.83 grid modernization plan in Indiana for 2017-2022 after the first one was rejected by the Indiana Utility Regulatory Commission (IURC) on May 8. The original $1.9B plan was filed under Indiana's SB 560, which allows the IURC to approve riders for a "transmission, distribution, and storage system improvement charge (TDSIC)". Of the original $1.9B plan, we believe that about ~$300M had been found questionable for rider eligibility under the law. Management had previously commented that it is closely following the Northern Indiana Public Service Company's (NIPSCO; NiSource subsidiary) $1.1Bn 'seven-year plan' which was rejected even after achieving a settlement. We would expect Duke to utilize the clarity gained from the NIPSCO case to help form this updated filing.

Duke still expects to update its Indiana infrastructure plan later this year but now can use NIPSCO's latest filing as a model to improve the probability of success. Mgmt believes the issue relates to adding more supporting detail.

- **Major gas pipelines moving along.** A formal FERC application for the Atlantic Coast Pipeline was filed in Sept, with approval expected in 2016 and commercial operation in late 2018. At Sabal Trail, FERC approval is expected in early 2016 with commercial operation in 2017.

Figure 7: Duke Energy Growth Capital Expenditures, 2015E-2019E

Growth Capital Expenditures ($M) - UBSe & Guidance	Previous July 2014 Forecast 2014E-2018E	Forecast 2015E-2019E
New Generation growth		
Florida CCGT, including Citrus Cty	$1,850	$1,500
Hines uprate, Osprey/Suwannee in Florida	$225	$350
Lee CCGT in SC	$600	$600
Fast Start CTs, CC Chiller Uprates, 2020/22 CC in SC		$725
NCEMPA purchase	$1,200	$1,200
Western Carolinas Modernization Project		$1,100
Other new generation		$2,500
Total specified projects	$3,875	$7,975
Category Guidance		~$8B
Commercial & Regulated Renewables		
Regulated Solar	$1,000	$1,275
Commercial Renewable	$1,200	$725
Total specified projects	$2,200	$2,000
Category Guidance		~$2B
Infrastructure growth		
Grid Modernization/T&D/SB560	$2,375	$5,100
SB560 Indiana T&D	*~$1.83B over 7 yrs*	
New Customer Connections	$2,400	$2,750
Commercial Transmission	$700	$250
Atlantic Coast Pipeline (40% stake)	$1,900	$1,900
Total specified projects	$7,375	$10,000
Category Guidance		$10B
Compliance growth		
EPA regs	$1,900	$3,150
NRC Fukushima regs	$1,300	$1,000
Total specified projects	$3,200	$4,150
Category Guidance		$4B
Other growth		
Other	$1,100	$1,050
Total specified projects	$1,100	$1,050

Source: UBS Estimates, Company Filings

Effectively resolves all outstanding IGCC dockets and more.

- **Edwardsport settlement significantly de-risks the project:** On September 18th, DUK filed a settlement of all operating and capital costs through 2017 for the Edwardsport Integrated Gasification Combined Cycle (IGCC) coal-fired power plant. Settling parties include the Indiana Office of Utility Consumer Counselor, the Duke Energy Indiana Industrial Group and Nucor Steel-Indiana. The agreement is subject to approval from Indiana regulators (expected 1H16) and if approved would increase customer bills by ~2%. The company expects to take a $90M pretax charge in 3Q15, including $85M of deferred operating costs since the company declared the plant "in-service" in June 2013 and an additional $5M cash provision for legal fees, bill credits, battery storage research, low-income energy assistance, and the Indiana Utility Ratepayer Trust. The Edwardsport charges will be *excluded from operating EPS*. The plant's total expected capital cost remains unchanged at ~$3.5B, for which the company has already written down $900M, with max recovery capped to $2.595B capital plus $85M of O&M and depreciation, which were recognized under this settlement. The current level of capital spending has yet to exceed the company's ~$3.5B budget; however, there is a narrow margin.

The settlement effectively resolves all pending IGCC dockets, including the combined IGCC 12 & 13 (including subdocket FAC-99 and other pending fuel proceedings). It also resolves IGCC 14 & 15 for costs through Sept 2014 and March 2015, respectively. Future filings are expected to be made annually rather than the current twice a year. Going forward, recoverable base operating and maintenance expense calendar year 2016 and 2017 are capped at $73.3Mn and $76.8Mn, respectively, while recoverable capital expenses for 2016 and 2017 are also capped at $36.1M and $16.9M, respectively (including ongoing capital additions in 2015 after April 1).

The agreement would appear to end the long-running controversy over DUK's in-service declaration and subsequent use of power (to power the gasifier) when output was zero ("net negative generation"), the costs of which were made eligible for fuel-clause recovery rather than capitalized as they would have been before the plant was "in-service". Challengers had noted that purchased power for the plant appeared much larger than the usual "negative generation" seen in other much smaller plants. The larger scale of costs was then cited as evidence that the plant should never have been declared in-service in June 2013, and thus some portion of the O&M and purchased power that has been in rates since IGCC 10 (Sept 2013) should have been capitalized (and possibly subject to write-downs) rather than deferred for cash recovery as O&M.

- **Previous Edwardsport appeal still pending:** In September 2014, the Indiana Court of Appeals ruled that the Indiana Utility Regulatory Commission (IURC) must reconsider its IGCC 9 rate-increase decision of April 2013 which had authorized Duke Energy to recover $61 million of financing costs it had incurred due to construction delays on the 618-MW Edwardsport IGCC plant. On Feb 25, 2015, the IURC issued a new order upholding its prior decision, although intervenors have appealed this new order to the Indiana Court of Appeals. That appeal is still pending.

- **Resolution on federal and North Carolina disputes:** DUK closed a 15-year old legal saga that began with a lawsuit against DUK for making alleged "major modifications" on 25 coal-fired plants without installing the required "best available emissions controls". Under the settlement agreement, DUK agrees to close 2 of 5 units at its 1,140-MW Allen plant in NC and will also shut a third unit not part of the case, all by Dec 31, 2024 (42 months earlier than planned). The remaining 555 MW will continue to operate and there will be no layoffs associated with the agreement. Additionally, DUK agrees to spend $4.4M on environmental projects and donations and a $975K federal civil penalty.

- **Coal ash remediation**. In September Duke settled with the North Carolina Department of Environmental Quality (NCDEQ) over claims of groundwater contamination at its Sutton and 13 other North Carolina coal assets. The original fine from March was $25.1M, which Duke appealed and the parties ultimately settled on $7Mn along with Duke remediating the Asheville (more details on the Asheville site below), Belews Creek, and Lee assets. DUK has since announced an incremental three plants for action in addition to the initial four dealt with through legislation. Filings with the Department of Environmental Quality are expected shortly. The utility plans to file for recovery of the investment within upcoming ratecases, no different than past environmental remediation recovery filings. Management expects fully

capitalized ratebase treatment at authorized levels. *We continue to believe the bulk of spending for coal ash, particularly if accelerated (as recently indicated in a leaked report to the media),*

- **Settling Crystal River 3:** Duke reached a proposed settlement in September regarding the Crystal River 3 regulatory asset proceeding which includes a reduction of the proposed securitization value to $1.283Bn from $1.3Bn, driving an estimated $15Mn pre-tax charge *to operating EPS in 3Q15*. DUK had filed for PSC approval of a $170.3M electric base rate increase for 20 years beginning Jan 2016 based on the amortization of a $1.3B regulatory asset. As part of the settlement the intervenors have agreed to not dispute the asset prudency. The securitization was facilitated by the passage of SB 288/HB 7109 in June and the next step is for the Florida Public Service Commission to approve the financing plan. If all goes according to plan, the securitization bonds could be issued with a recovery charge in place as early as February 2016. Proceeds from the securitization could be used to pay down maturing debt at the Florida subsidiary.

  Details of the full Crystal River agreement are available here.
  (Docket # 150148-EI)

In the unlikely scenario that the PSC does not approve the securitization, non-securitized recovery method would still be available.

- **Continuing to add wind capacity:** Duke signed its latest wind deal in early September with a 50% purchase of the 211MW Mesquite Creek via its Sumitomo joint venture. The total commercial wind and solar portfolio is expected to total 2,700 MW by the end of this year.

- **Regulated solar progress.** DUK remains on track to complete construction of 128 MW of utility-scale solar in North Carolina by the end of this year and is moving forward with investments in both South Carolina and Florida. In Florida, DUK anticipates reaching 500 MW of utility scale solar over the next 10 years despite the lack of an RPS or state tax credit there. While solar today is a tough economic proposition in the state given low priced mostly gas fired electricity there, the company currently sees demand from green-oriented C&I customers and anticipates lower cost technology in the future will ultimately make solar more financially competitive.

Reduced 2015 guidance despite favorable weather

Overearning in the Carolinas is not expected to continue in 2016+.

On the 3Q call, 2015 guidance was reduced from $4.55-$4.75 to $4.55-$4.65, citing weakness from International partially offset by favorable weather in the US and extra accretion from the earlier-than-expected $1.5B, 19.8M share repurchase program completed in 2Q. Management is also expecting a -$0.04 impact from a higher effective tax rate as the result of a possible extension of bonus depreciation.

At the midpoint, this is comprised of $0.30 from International (down from $0.60 in 2014), $4.13 from core utilities and the commercial segment (renewables remaining after the sale of the merchant coal fleet earlier this year), and $0.17 of favorable weather.

We also note that although regulatory surveillance reports show the Carolinas utilities earning above their allowed ROE for the 12 months ending June 2015, this is largely due to temporary factors such as favorable weather and the remaining benefits of nuclear levelization, with the latter ceasing in 2016+.

Implied 2016E guidance is flat with 2015E

The company intends to present formal 2016 guidance in Feb 2016 with 4Q earnings results, although some factor guidance was given during the 3Q call. Looking ahead on a year-over-year basis, there's the negative comparison to +$0.17 of weather vs normal YTD 2015, a full year of NCEMPA assets for which we estimate an incremental +$0.04 (based on +$0.04 in 2H15), modest retail load growth of 0.5%-1.0%, lower O&M, growth in renewables, lost Genco earnings offset with stock repurchases, and improved hydro in Brazil along with inflation-indexed contracts there and stable oil pricing.

More specifically, for 2016, management now expects only the remaining core regulated and commercial businesses to grow 4%-6% into 2016 from 2015E guidance of $4.13, implying a midpoint of $4.34 for these segments. For International, little to no improvement is expected from 2015E guidance of $0.30 for International. This implies total 2016 guidance of approximately ~$4.65.

As a reminder, the Piedmont transaction is not expected to close until the end of 2016.

Pullback from 4%-6% long-term growth objectives as rebasing to 2016

Although no explicit guidance has yet been given for 2016, new long-term guidance is for 4%-6% total EPS growth off a new 2016 base. The point of the rebasing from the prior 2013 $4.33 base is to skip over the past few years of deteriorating International results due to poor Brazilian hydrology, plunging Brent crude prices that partially correlate to MBTE for National Methanol, and increasingly unfavorable currency exchange rates, particularly the Brazilian Real. This follows the 2Q disclosure which had subtly shifted to "targeting" 4%-6% growth in light of International "macroeconomic challenges". The rebasing on flattish 2016 results has the effect of reducing long-term guidance from 2016E-2019E by as much as -$0.35 to -$0.40 from the prior 2013 base.

While the Piedmont acquisition is not embedded in either long-term guidance CAGRs or our estimates, we estimate that the deal is accretive by $0.10-$0.13/sh in 2017/2018 (2.0-3.0%) with 5%-7% O&M synergies and $0.08-$0.11/sh excluding synergies. We calculate that this improves the long term CAGR by about 50 bps. However, in the event of a sale of Brazilian hydro assets, we expect -$0.10 of dilution from this sale to offset much of the accretion from Piedmont.

Summary of earnings guidance through 2020. In the table below, we digest and summarize management's overall segment guidance as presented in various places/forums throughout this past year (much if it from the February annual update. We've updated portions (particularly international) for recent circumstances.

Figure 8: DUK 2015-2019 Guidance vs 2014A and UBSe 2015E

Key 2015 guidance and assumptions ($M)	2014A	2015 Guidance	UBSe 2015E	2015-2017	2018-2019
Adjusted segment income (expense)					
Regulated Utilities	$2,897	$2,950	$3,035		
International Energy	428	208	208		
Commercial Power *	109	185	189		
Other	(216)	(220)	(240)		
Duke Energy Consolidated	$3,071	$3,260	$3,191		
Additional consolidated information:		$4.63	$4.60		
Interest expense	$1,622	$1,670			
Adjusted effective tax rate	~32%	32%-33%			
Debt AFUDC and capitalized interest	$75	$90			
AFUDC equity	$135	$180			
Capital expenditures & AFUDC	$5.5B	$7.4B-$7.8B			
Utilities:					
Retail load growth	0.5%	0.5%-1.0%		~1.0%	growth
Retail load growth EPS (UBSe) @ 0.10 per 1%		+0.08		+0.20	
Ute O&M keep less than load growth (UBSe EPS impact)		-0.43			
Pension		-0.01			
Wholesale contracts		+0.10		0.01-0.03 in 2016/17	
Ratebase growth (excluding CR3 $1.45B)		$2B		$9.45B	$5.9B
Ratebase growth EPS (UBSe; excluding ~ $0.12 for CR3 in 2017)		+0.16		+0.76	+0.47
Earned ROE EPS impacts @ 0.40 per 100 bps					
Carolinas 10.6% in 2014 to overearning in 2015 (weather and nuclear levelization, both of which go away in 2016)					
Florida 11.2% in 2014 to 11.0%-11.5% in 2015					
Indiana 9.4% in 2014 to 9.5%-10.0% in 2015					
OH/KY 10.6% in 2014 to 10.0%-10.5% in 2015					
Portion from nuclear levelization dropoff		-0.07			
Portion from return to normal weather		+0.17			
Other overall ROE change impact		+0.08			
Possible coal ash remediation beyond $1.3B in plan				growth	growth
Possible GHG compliance					growth
Total utilities EPS vs 2014A		+0.07			
Commercial Power:					
Atlantic Coast Pipeline $1B investment EPS impact (UBSe)				+0.08	
Midwest Gen earnings for 1H15		$90M			
Midwest Gen 2015E EPS vs 2014A (UBSe)		+0.06			
Renewables investment		$600M		~$1B-$2B	
Renewables EPS vs 2014A (UBSe)		+0.06		+0.14	
Total Commercial Power EPS vs 2014A		+0.11			
International:					
Brazil Hydrology - assume normal 2015+		-0.06			
Chilean Tax Benefits 2Q14		-0.07			
Brazil FX @2.85 BRL/US$		-0.08		0.02-0.03 per 10% change	
Brent Crude (NMC) @$65/bbl		-0.07		0.01-0.02 per $10/bbl change	
Total International EPS vs 2014A		-0.30			
Holdco:					
Balanced recap 2015 net EPS impact		+0.05			
Proceeds from Midwest Gen sale mid-2015		$2.8B			
Paydown Holdco debt 2015 with Midwest Gen proceeds		~$1.3B			
Repurchase shares mid-2015 with Midwest Gen proceeds		~$1.5B			
Paydown Holdco debt with international cash repatriation		~$1B			
Wgtd-avg shares outstanding (M) **	707	~693		No equity issuance through 2017	

Source: Company filings, UBS estimates

Tweaking our estimates up a few pennies

Our estimates continue to assume that the International segment stays flat at the ~$0.30 level for 2016 and then grows 2%-3% annually thereafter. We embed neither the Piedmont transaction nor the sale of Brazilian hydro into our estimates. We've tweaked our utility and parent estimates up a few pennies for cost cutting, resulting in an overall 5.1% EPS CAGR from 2016E-2019E.

We think the bottom line is that the rebasing on 2016 certainly gives the new long-term CAGR guidance a fresh start, with up to ~$0.15 of possible upside should the Brazilian rainy season (Nov-April) this year prove more beneficial than a flat result with 2015.

Figure 9: DUK Estimates, 2013A-2019E

DUK EPS	2013A	2014E	2015E	2016E	2017E	2018E	2019E
UBSe	$4.35	$4.55	$4.60	$4.65	$4.88	$5.13	$5.39
UBSe International	*$0.60*	*$0.61*	*$0.30*	*$0.31*	*$0.32*	*$0.33*	*$0.34*
Prior UBSe	$4.35	$4.55	$4.59	$4.65	$4.86	$5.09	$5.34
Consensus			$4.59	$4.71	$4.94	$5.27	$5.75
Guidance			$4.55-$4.65				
UBSe 2016-2019 CAGR							5.1%
LT Guidance: Grow EPS 4%-6% off 2016 base $4.65							
4% growth				*$4.65*	$4.84	$5.03	$5.23
5% growth				*$4.65*	$4.88	$5.13	$5.38
6% growth				*$4.65*	$4.93	$5.22	$5.54

Source: Company Filings, FactSet, and UBS Estimates

Who are the peers?

We include our regulated peer group to derive our 15.5x multiple for Duke below.

Figure 10: UBS Utilities Comp Table, 12/21/2015

UBS

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	Ticker	Rating	Market Cap. ($ in millions)	Price 21-12-15	Price Target	Dividend Yield	P/E Multiple						Earnings Per Share				EV / EBITDA Multiple		
							2013E	2014E	2015E	2016E	2017E	2018E	2015E	2016E	2017E	2018E	2015E	2016E	2017E
COMPETITIVE INTEGRATED																			
American Electric Power, Inc.	AEP	Buy	27,864	56.77	62.00	3.95%	17.6	16.5	15.2	15.1	14.7	14.0	3.72	3.76	3.87	4.05	8.8	9.1	9.1
Dominion Resources	D	Buy	39,953	67.11	77.00	3.86%	20.7	19.6	18.5	17.5	16.3	14.4	3.63	3.83	4.11	4.65	11.3	10.4	9.6
Entergy Corp.	ETR	Sell	11,840	66.37	62.00	5.12%	12.4	11.4	11.3	14.1	14.2	14.1	5.89	4.71	4.68	4.72	9.4	9.5	9.1
Exelon Corp.	EXC	Neutral	25,003	27.19	33.00	4.56%	10.9	11.4	10.9	10.6	9.9	11.8	2.50	2.55	2.75	2.31	7.7	7.6	7.2
FirstEnergy Corp.	FE	Neutral	13,203	31.21	32.00	4.61%	10.3	12.3	11.6	11.6	12.1	12.1	2.70	2.69	2.59	2.59	7.4	7.2	7.3
NextEra Energy	NEE	Buy	47,174	102.45	112.00	3.01%	20.6	19.3	18.0	16.6	15.7	14.8	5.69	6.16	6.52	6.91	10.8	10.2	9.8
Public Service Enterprise Group	PEG	Neutral	19,171	37.89	42.00	4.12%	14.7	13.7	13.1	13.0	13.2	13.5	2.89	2.92	2.86	2.80	7.1	6.7	6.5
Sempra Energy	SRE	Buy	23,545	94.86	116.00	2.95%	24.3	20.3	18.7	18.0	17.1	14.4	5.07	5.26	5.53	6.59	9.9	9.4	8.8
Average						4.02%	16.4	15.6	14.7	14.6	14.2	13.6	*5.8%*	*-0.7%*	*3.3%*	*5.2%*	9.0	8.8	8.4
REGULATED INTEGRATED UTILITIES																			
Large Cap																			
Ameren Corp.	AEE	Neutral	10,516	43.34	43.00	3.92%	20.7	18.1	17.0	15.8	14.6	13.8	2.55	2.75	2.96	3.13	7.9	7.4	7.2
Alliant Energy Corp.	LNT	Not Rated	7,092	62.56	NA	3.52%	18.0	18.1	17.4	16.5	15.6	14.6	3.60	3.79	4.02	4.29	na	na	na
CenterPoint Energy Inc.	CNP	Not Rated	7,512	17.46	NA	5.67%	13.7	14.9	16.5	15.6	14.9	14.1	1.06	1.12	1.17	1.24	7.5	7.4	7.0
CMS Energy Corporation	CMS	Neutral	9,929	35.73	38.00	3.25%	21.5	20.2	18.9	17.7	16.5	15.2	1.89	2.02	2.16	2.36	9.5	9.0	9.1
DTE Energy Co.	DTE	Buy	14,238	79.33	96.00	3.68%	19.4	17.2	16.3	15.9	14.7	13.7	4.86	5.00	5.40	5.80	8.9	8.7	8.6
Duke Energy	DUK	Buy	48,211	70.04	71.00	4.71%	16.1	15.4	15.2	15.1	14.4	13.7	4.60	4.65	4.88	5.13	9.3	9.3	8.6
Edison International	EIX	Buy	19,409	59.57	66.00	3.22%	15.8	13.1	15.7	15.6	14.5	13.7	3.79	3.82	4.11	4.33	7.4	7.1	6.8
PG&E Corporation	PCG	Neutral	26,151	53.32	57.00	3.41%	19.6	15.2	17.5	14.2	14.5	13.8	3.05	3.75	3.68	3.85	7.9	7.0	7.3
Pinnacle West Capital Co.	PNW	Neutral	7,005	63.19	68.00	3.96%	17.2	17.7	16.7	15.6	15.1	13.9	3.78	4.05	4.19	4.54	8.8	7.9	8.0
PPL Corporation	PPL	Buy	22,673	33.75	36.00	4.47%	13.8	13.8	15.0	14.3	13.9	13.3	2.24	2.36	2.43	2.53	10.9	11.4	10.8
SCANA Corp.	SCG	Neutral	8,669	60.66	61.00	3.59%	17.9	16.0	16.1	15.1	14.5	13.9	3.78	4.02	4.18	4.38	9.2	8.9	11.0
Southern Company	SO	Sell	42,111	46.33	41.00	4.68%	17.1	16.5	15.7	15.2	15.3	14.8	2.96	3.04	3.04	3.14	9.4	8.9	9.2
WEC Energy Group Inc.	WEC	Sell	15,977	50.61	50.00	3.36%	20.1	19.1	18.6	17.2	16.4	15.4	2.72	2.93	3.09	3.30	8.5	8.7	9.8
Xcel Energy Inc.	XEL	Neutral	18,123	35.71	36.00	3.58%	18.7	17.6	16.9	16.0	15.2	14.6	2.11	2.23	2.35	2.45	9.1	8.8	9.0
Average						3.93%	17.6	16.6	16.7	15.7	15.0	14.2	*-0.7%*	*5.9%*	*4.7%*	*5.9%*	8.8	8.5	8.6
Small and Mid-Caps																			
Avista Corp	AVA	Neutral	2,183	35.03	33.00	3.77%	18.9	18.1	18.3	17.3	16.5	15.8	1.92	2.03	2.13	2.22	9.5	9.3	9.3
Black Hills Corp.	BKH	Not Rated	2,206	43.11	NA	3.76%	14.9	14.9	14.5	14.1	13.4	na	2.98	3.05	3.22	na	10.6	8.2	8.1
Empire District Electric Company	EDE	Sell	1,207	27.55	21.00	3.77%	17.9	17.8	19.9	18.8	17.9	17.2	1.38	1.47	1.54	1.60	8.4	7.8	7.4
Great Plains Energy	GXP	Not Rated	4,159	26.94	NA	3.90%	17.2	17.2	19.2	15.3	14.7	13.9	1.40	1.76	1.83	1.94	9.6	8.6	8.2
Hawaiian Electric Industries	HE	Not Rated	3,073	28.60	NA	4.34%	17.0	17.7	17.5	16.2	15.3	14.0	1.63	1.77	1.87	2.05	10.2	10.9	12.5
Idacorp, Inc.	IDA	Not Rated	3,441	68.35	NA	2.98%	17.8	18.2	17.7	17.6	17.1	17.0	3.86	3.89	4.00	4.03	na	11790.8	11499.6
NorthWestern Corp	NWE	Not Rated	2,599	53.95	NA	3.56%	21.9	20.1	17.2	16.0	15.0	na	3.13	3.37	3.60	na	11.6	11.2	10.8
Portland General Electric Company	POR	Buy	3,175	35.77	41.00	3.35%	26.7	16.4	17.0	15.1	14.5	14.2	2.10	2.36	2.47	2.53	8.8	8.0	7.6
PNM Resources Inc.	PNM	Not Rated	2,361	29.64	NA	2.97%	19.9	20.0	18.6	18.2	15.4	14.5	1.59	1.63	1.92	2.05	na	na	na
UIL Holdings Corp.	UIL	Not Rated	1,962	34.64	NA	0.00%	15.3	15.4	14.6	na	na	na	2.38	na	na	na	na	na	na
TECO Energy Inc.	TE	Neutral	6,236	26.51	27.55	3.39%	28.0	25.8	24.0	22.6	20.4	19.1	1.10	1.17	1.30	1.39	8.9	8.7	9.4
Westar Energy, Inc.	WR	Neutral	5,869	41.55	40.00	3.47%	18.3	17.2	18.8	17.2	16.3	15.6	2.21	2.42	2.54	2.66	10.0	9.1	8.3
Average						3.27%	19.5	18.2	18.1	17.1	16.0	15.7	*1.4%*	*5.8%*	*6.0%*	*-5.2%*	9.7	1187.3	1158.1
Regulated Average						3.63%	17.6	17.4	17.3	16.3	15.5	14.8	*0.1%*	*6.7%*	*5.2%*	*4.1%*	9.2	521.0	508.4
REGULATED T&D UTILITIES																			
Consolidated Edison	ED	Sell	18,656	63.63	59.00	4.09%	16.8	17.8	16.0	15.8	15.5	14.9	3.98	4.02	4.09	4.26	8.9	8.2	8.0
Eversource Energy	ES	Neutral	15,996	50.43	52.00	3.31%	19.9	18.3	17.7	16.8	15.7	14.7	2.85	3.00	3.21	3.42	10.5	10.4	10.5
InfraREIT Inc	HIFR	Not Rated	787	18.07	NA	4.98%	27.8	38.4	16.0	16.6	12.6	9.1	1.13	1.09	1.44	1.98	na	na	na
ITC Holdings Corp	ITC	Neutral	5,891	38.40	37.00	1.95%	23.6	19.8	18.9	19.6	17.4	15.9	2.04	1.96	2.21	2.41	11.9	12.0	8.8
PEPCO Holdings Inc.	POM	Not Rated	6,556	25.85	NA	4.18%	20.4	21.2	23.1	22.3	20.5	17.8	1.12	1.16	1.26	1.45	9.6	9.4	9.0
Average						3.70%	21.7	23.1	18.3	18.2	16.4	14.5	*11.7%*	*1.0%*	*8.8%*	*10.8%*	10.2	10.0	9.1
		Rating	Market Cap. ($ in millions)	Price 21-12-15	Price Target	Net Debt		Enterprise Value		Dividend Yield				EBITDA(R) ($ in millions) 2015E	2016E	2017E	2018E	EV / EBITDA Multiple 2015E	2016E	2017E
INDEPENDENT POWER PRODUCERS																			
AES Corporation	AES	Neutral	6,195	9.21	13.00	25,592		25,431		4.86%			EPS:	1.29	1.33	1.41	1.52	5.7	5.7	5.6
Dynegy, Inc.	DYN	Buy	1,432	11.88	28.00	6,226		7,552		0.00%				889	1,131	1,278	1,475	9.2	6.8	6.2
Calpine Corporation	CPN	Buy	4,719	13.23	19.00	10,565		14,978		0.00%				2,052	1,912	2,121	2,052	7.5	8.1	7.2
NRG Energy Inc.	NRG	Buy	3,354	10.68	14.00	18,568		21,903		5.59%				3,311	3,078	2,895	3,172	6.3	6.7	7.0
Talen Energy Corp	TLN	Neutral	790	6.15	11.00	3,931		4,604		0.00%				1,005	909	689	718	5.3	4.9	6.2
Average						12,976		14,893		2.09%				*-32.3%*	*-3.1%*	*-0.7%*	*6.2%*	6.6	6.7	6.4
MARKET INDEX	SPX	S&P 500		2,006						Source: UBS estimates for companies under coverage; all others are Factset									

Source: UBS estimates for companies under coverage; all others are Factse

* - Excluded from P/E ratio calculation

Source: UBS estimates for companies under coverage; all others are Factse

Source: UBS Estimates, FactSet, Company filings

Acquisition of Piedmont at 27x 2017E P/E

For our full note including accompanying accretion tables and debt metrics, please see *8/26/15 The Duke of North Carolina.*

Duke announced the acquisition of Piedmont Natural Gas (PNY) for $4.9Bn equity value ($60/sh vs $42/sh Friday close) as another electric utility executes on natural gas M&A. Piedmont is concentrated in North Carolina (70% of rate base) and also has ownership in the Atlantic Coast and Constitution pipelines. Piedmont has been growing EBITDA and ratebase at ~9% along with 1.6-2.0% customer growth, notable premiums to Duke's ~4% earnings growth target (<2% 2010A-2015E EPS CAGR) and ~1% customer growth.

Modest accretion as high purchase price a drag

We estimate that the deal is accretive by $0.10-$0.13/sh in 2017/2018 (2.0-3.0%) with synergies and $0.08-$0.11/sh excluding synergies. From the Duke-Progress transaction in 2011 Duke management commented that it believed the synergies on that deal would be in the range of 5-7% total non-fuel O&M, consistent with other transactions. For the Piedmont transaction management commented that synergies were not a consideration in the accretion and we view them as immaterial as well. Given the magnitude of debt financing (details below), a 50bp increase in the interest rate would reduce accretion by ~$0.01-$0.02/sh.

We estimate ~2% EPS accretion for the $4.9Bn transaction, with a 50 bps improvement in long-term EPS CAGR.

Would "enhance" EPS growth

Management states that the deal "enhances" Duke's long-term 4-6% EPS target. We estimate about 50 bps of enhancement from $0.10/sh EPS accretion (~2%) for the 2013A-2017E EPS CAGR. The $6.7Bn enterprise value is expected to be financed with (1) assumption of $1.8Bn; (2) a $500-$750Mn equity forward; (3) holding company debt; and (4) cash. Potential sources of cash include a dividend from Florida to Duke Corp from the Crystal River 3 securitization ($600Mn) and Latin American repatriation ($300Mn).

Accretion premised on heavy debt financing

Duke is financing the $6.7Bn enterprise value by assuming $1,800Mn of Piedmont debt, issuing $500-$750Mn equity via a forward sale, and pointed at ~$1Bn of cash indicating that the remaining ~$3.3Bn will be financed with Duke holding company debt. The incremental after-tax interest expense on the deal will erase nearly half of Piedmont's consensus 2017E earnings. The ~75% debt-to-total capitalization implied for the deal is on the high-end of the spectrum as utilities continue to take advantage of historically low interest rates to execute on M&A.

Figure 11: Piedmont Financing

Piedmont Transaction Financing (UBSe $Mn)	
Enterprise Value	6,700
Assumption of PNY Debt	1,800
DUK Equity ($500-$750Mn)	625
DUK Cash (~$1Bn)	1,000
DUK Holding Co Debt	3,275
Debt-to-Capitalization	76%
After-Tax Interest (at 4%)	85
PNY Consensus 2017 NI	180

Source: Company Filings, FactSet, and UBSe

Transaction expected to close in 4Q16

The deal requires approval from the North Carolina commission as well as the US Department of Justice and FTC. Approval is not required in South Carolina and Tennessee but management commented that it has been communicating with the relevant regulators to keep them informed. The transaction is also subject to majority shareholder approval of Piedmont but not Duke.

Deal sets new high watermark for the industry

Duke's proposed acquisition of Piedmont continues the upward trend in 2015 of implied takeout P/E multiples and is well above both Southern Company/AGL

Resources in August (21.6x 2017E) and Emera-TECO in September (21.2x 2017E). The DUK-PNY transaction represents a 42% premium to Friday's close of $42.22 and a 65% premium to where shares traded as recently as last month.

Continuation of growing interest in natural gas and emphasis on sales growth

Following the Southern/AGL Resources deal in August 2015, TECO/New Mexico Gas Company in May 2013, and numerous pipeline stakes we see electric utilities increasingly interested in gas infrastructure. As electric demand stagnates (Duke previously characterized as "anemic") we expect to see more interest in gas utilities and utes that see real growth.

Duke Energy (DUK.N)

Income statement (US$m)	12/12	12/13	12/14	12/15E	% ch	12/16E	% ch	12/17E	12/18E	12/19E
Revenues	**19,624**	**24,598**	**23,925**	**24,484**	*2.3*	**25,118**	*2.6*	**25,751**	**26,214**	**26,813**
Gross profit	12,056	15,414	15,458	15,675	*1.4*	16,253	*3.7*	16,805	17,233	17,793
EBITDA (UBS)	**7,315**	**8,693**	**9,577**	**9,484**	*-1.0*	**9,839**	*3.7*	**10,287**	**10,711**	**11,168**
Depreciation & amortisation	(2,289)	(2,808)	(3,066)	(3,126)	*1.9*	(3,322)	*6.3*	(3,454)	(3,550)	(3,671)
EBIT (UBS)	**5,026**	**5,885**	**6,511**	**6,359**	*-2.3*	**6,517**	*2.5*	**6,833**	**7,161**	**7,497**
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	(1,242)	(1,546)	(1,622)	(1,660)	*-2.4*	(1,832)	*-10.3*	(1,912)	(1,990)	(2,059)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**3,784**	**4,339**	**4,889**	**4,698**	*-3.9*	**4,686**	*-0.3*	**4,921**	**5,171**	**5,438**
Tax	(1,290)	(1,261)	(1,669)	(1,502)	*10.0*	(1,495)	*0.4*	(1,570)	(1,653)	(1,740)
Profit after tax	**2,494**	**3,078**	**3,220**	**3,196**	*-0.7*	**3,190**	*-0.2*	**3,351**	**3,519**	**3,698**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	(14)	(11)	(6)	(6)	*0.0*	(6)	*0.0*	(6)	(6)	(6)
Extraordinary items	(715)	(416)	(1,336)	(79)	*94.1*	0	-	0	0	0
Net earnings (local GAAP)	**1,765**	**2,651**	**1,878**	**3,112**	*65.7*	**3,184**	*2.3*	**3,345**	**3,513**	**3,692**
Net earnings (UBS)	**2,480**	**3,067**	**3,214**	**3,190**	*-0.7*	**3,184**	*-0.2*	**3,345**	**3,513**	**3,692**
Tax rate (%)	34.1	29.1	34.1	32.0	*-6.4*	31.9	*-0.1*	31.9	32.0	32.0

Per share (US$)	12/12	12/13	12/14	12/15E	% ch	12/16E	% ch	12/17E	12/18E	12/19E
EPS (UBS, diluted)	4.32	4.35	4.55	4.60	*1.2*	4.65	*1.0*	4.88	5.13	5.39
EPS (local GAAP, diluted)	3.08	3.76	2.66	4.49	*69.0*	4.65	*3.6*	4.88	5.13	5.39
EPS (UBS, basic)	4.32	4.35	4.55	4.60	*1.2*	4.65	*1.0*	4.88	5.13	5.39
Net DPS (US$)	3.03	3.09	3.16	3.28	*3.6*	3.39	*3.5*	3.54	3.69	3.94
Cash EPS (UBS, diluted)[1]	8.31	8.32	8.88	9.11	*2.6*	9.50	*4.3*	9.93	10.31	10.75
Book value per share	58.07	58.65	57.93	58.92	*1.7*	60.17	*2.1*	61.51	62.95	64.41
Average shares (diluted)	573.92	705.75	707.00	693.19	*-2.0*	684.76	*-1.2*	684.76	684.76	684.76

Balance sheet (US$m)	12/12	12/13	12/14	12/15E	% ch	12/16E	% ch	12/17E	12/18E	12/19E
Cash and equivalents	1,424	1,501	2,036	2,053	*0.8*	1,578	*-23.1*	1,059	979	580
Other current assets	8,698	9,015	9,539	10,582	*10.9*	10,783	*1.9*	10,994	11,138	11,322
Total current assets	**10,122**	**10,516**	**11,575**	**12,635**	*9.2*	**12,361**	*-2.2*	**12,053**	**12,117**	**11,902**
Net tangible fixed assets	68,558	69,490	70,037	70,211	*0.2*	74,914	*6.7*	79,210	83,760	87,714
Net intangible fixed assets	16,365	16,340	16,321	16,321	*0.0*	16,321	*0.0*	16,321	16,321	16,321
Investments / other assets	18,811	18,433	22,776	22,776	*0.0*	22,776	*0.0*	22,776	22,776	22,776
Total assets	**113,856**	**114,779**	**120,709**	**121,944**	*1.0*	**126,372**	*3.6*	**130,360**	**134,974**	**138,714**
Trade payables & other ST liabilities	6,174	5,701	5,912	7,428	*25.6*	7,577	*2.0*	7,665	7,863	7,904
Short term debt	3,855	2,943	5,321	4,392	*-17.46*	4,392	*0.00*	2,514	2,514	2,514
Total current liabilities	**10,029**	**8,644**	**11,233**	**11,820**	*5.2*	**11,969**	*1.3*	**10,179**	**10,377**	**10,418**
Long term debt	36,351	38,152	37,213	37,142	*-0.2*	39,264	*5.7*	42,764	44,764	45,964
Other long term liabilities	26,442	26,575	31,364	32,635	*4.1*	33,936	*4.0*	35,300	36,730	38,230
Preferred shares	93	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**72,915**	**73,371**	**79,810**	**81,596**	*2.2*	**85,168**	*4.4*	**88,243**	**91,872**	**94,612**
Common s/h equity	40,941	41,408	40,899	40,348	*-1.3*	41,204	*2.1*	42,117	43,102	44,102
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	**113,856**	**114,779**	**120,709**	**121,944**	*1.0*	**126,372**	*3.6*	**130,360**	**134,974**	**138,714**

Cash flow (US$m)	12/12	12/13	12/14	12/15E	% ch	12/16E	% ch	12/17E	12/18E	12/19E
Net income (before pref divs)	1,765	2,651	1,878	3,112	*65.7*	3,184	*2.3*	3,345	3,513	3,692
Depreciation & amortisation	2,289	2,808	3,066	3,126	*1.9*	3,322	*6.3*	3,454	3,550	3,671
Net change in working capital	(63)	(921)	(713)	472	-	(52)	-	(122)	54	(143)
Other operating	330	1,200	1,171	1,271	*8.5*	1,301	*2.4*	1,364	1,431	1,499
Operating cash flow	**4,321**	**5,738**	**5,402**	**7,980**	*47.7*	**7,756**	*-2.8*	**8,040**	**8,547**	**8,719**
Tangible capital expenditure	(5,501)	(5,526)	(5,384)	(7,800)	*-44.9*	(9,750)	*-25.0*	(8,025)	(8,375)	(7,800)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	(451)	0	(54)	1,700	-	275	*-83.8*	275	275	175
Other investing	(239)	629	155	0	-	0	-	0	0	0
Investing cash flow	**(6,191)**	**(4,897)**	**(5,283)**	**(6,100)**	*-15.5*	**(9,475)**	*-55.3*	**(7,750)**	**(8,100)**	**(7,625)**
Equity dividends paid	(1,752)	(2,188)	(2,234)	(2,243)	*-0.4*	(2,321)	*-3.5*	(2,424)	(2,527)	(2,698)
Share issues / (buybacks)	23	9	25	0	-	0	-	0	0	0
Other financing	(773)	(1,137)	(1,102)	(1,129)	*-2.42*	(1,245)	*-10.31*	(1,300)	(1,353)	(1,400)
Change in debt & pref shares	1,950	933	2,779	(1,000)	-	2,122	-	1,622	2,000	1,200
Financing cash flow	**(552)**	**(2,383)**	**(532)**	**(4,372)**	*NM*	**(1,445)**	*67.0*	**(2,102)**	**(1,880)**	**(2,898)**
Cash flow inc/(dec) in cash	**(2,422)**	**(1,542)**	**(413)**	**(2,491)**	*NM*	**(3,164)**	*-27.0*	**(1,812)**	**(1,433)**	**(1,804)**
FX / non cash items	1,736	1,619	948	2,508	*164.5*	2,689	*7.2*	1,293	1,352	1,406
Balance sheet inc/(dec) in cash	**(686)**	**77**	**535**	**17**	*-96.8*	**(475)**	-	**(519)**	**(80)**	**(398)**

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.

Duke Energy (DUK.N)

Valuation (x)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
P/E (local GAAP, diluted)	21.0	18.5	27.8	15.6	15.0	14.3	13.6	12.9
P/E (UBS, diluted)	14.9	16.0	16.2	15.2	15.0	14.3	13.6	12.9
P/CEPS	7.8	8.3	8.3	7.7	7.3	7.0	6.8	6.5
Equity FCF (UBS) yield %	(3.2)	0.4	0.0	0.4	(4.2)	0.0	0.4	1.9
Net dividend yield (%)	4.7	4.5	4.3	4.7	4.9	5.1	5.3	5.6
P/BV x	1.1	1.2	1.3	1.2	1.2	1.1	1.1	1.1
EV/revenues (core)	3.4	3.6	3.9	3.6	3.5	2.7	2.6	2.6
EV/EBITDA (core)	9.0	10.1	9.6	9.3	9.0	6.7	6.4	6.1
EV/EBIT (core)	13.1	15.0	14.2	13.8	13.6	10.0	9.6	9.1
EV/OpFCF (core)	13.1	15.0	14.2	13.8	13.6	10.0	9.6	9.1
EV/op. invested capital	1.4	1.4	1.5	1.5	1.5	1.1	1.1	1.0

Enterprise value (US$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Market cap.	37,120	48,931	52,148	48,053	48,053	48,053	48,053	48,053
Net debt (cash)	28,746	39,235	40,046	39,989	40,779	43,149	43,149	43,149
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**65,866**	**88,166**	**92,194**	**88,042**	**88,832**	**91,201**	**91,201**	**91,201**
Non core assets	0	0	0	0	0	(22,776)	(22,776)	(22,776)
Core enterprise value	**65,866**	**88,166**	**92,194**	**88,042**	**88,832**	**68,425**	**68,425**	**68,425**

Growth (%)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Revenue	35.1	25.3	-2.7	2.3	2.6	2.5	1.8	2.3
EBITDA (UBS)	33.0	18.8	10.2	-1.0	3.7	4.6	4.1	4.3
EBIT (UBS)	36.1	17.1	10.6	-2.3	2.5	4.9	4.8	4.7
EPS (UBS, diluted)	-1.3	0.6	4.6	1.2	1.0	5.0	5.0	5.1
Net DPS	1.9	2.0	2.3	3.6	3.5	4.4	4.2	6.8

Margins & Profitability (%)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Gross profit margin	61.4	62.7	64.6	64.0	64.7	65.3	65.7	66.4
EBITDA margin	37.3	35.3	40.0	38.7	39.2	39.9	40.9	41.7
EBIT margin	25.6	23.9	27.2	26.0	25.9	26.5	27.3	28.0
Net earnings (UBS) margin	12.6	12.5	13.4	13.0	12.7	13.0	13.4	13.8
ROIC (EBIT)	10.8	9.5	10.7	11.0	11.1	11.0	11.0	11.0
ROIC post tax	7.1	6.8	7.1	7.5	7.5	7.5	7.5	7.5
ROE (UBS)	7.8	7.4	7.8	7.9	7.8	8.0	8.2	8.5

Capital structure & Coverage (x)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Net debt / EBITDA	5.3	4.6	4.2	4.2	4.3	4.3	4.3	4.3
Net debt / total equity %	95.0	95.6	99.0	97.9	102.1	105.0	107.4	108.6
Net debt / (net debt + total equity) %	48.7	48.9	49.8	49.5	50.5	51.2	51.8	52.1
Net debt/EV %	59.0	44.9	43.9	44.8	47.4	64.6	67.7	70.0
Capex / depreciation %	NM	196.8	175.6	NM	NM	NM	NM	NM
Capex / revenue %	28.0	22.5	22.5	NM	NM	NM	NM	29.1
EBIT / net interest	4.0	3.8	4.0	3.8	3.6	3.6	3.6	3.6
Dividend cover (UBS)	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Div. payout ratio (UBS) %	70.1	71.1	69.5	71.2	72.9	72.5	71.9	73.1

Revenues by division (US$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Others	19,624	24,598	23,925	24,484	25,118	25,751	26,214	26,813
Total	**19,624**	**24,598**	**23,925**	**24,484**	**25,118**	**25,751**	**26,214**	**26,813**

EBIT (UBS) by division (US$m)	12/12	12/13	12/14	12/15E	12/16E	12/17E	12/18E	12/19E
Others	5,026	5,885	6,511	6,359	6,517	6,833	7,161	7,497
Total	**5,026**	**5,885**	**6,511**	**6,359**	**6,517**	**6,833**	**7,161**	**7,497**

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

Forecast returns

Forecast price appreciation	+8.9%
Forecast dividend yield	4.9%
Forecast stock return	+13.8%
Market return assumption	6.0%
Forecast excess return	+7.8%

Statement of Risk

Risks to our estimates and price targets include: unfavorable terms of regulatory approval, including clawback to customers of synergies; mild weather; unfavorable environmental legislation; unexpected plant outages; commodity price risk; foreign country and currency risk; and unattained merger synergies.

Required Disclosures

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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.	49%	33%
Neutral	FSR is between -6% and 6% of the MRA.	40%	26%
Sell	FSR is > 6% below the MRA.	12%	18%
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 30 September 2015.
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.

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UBS Securities LLC: Julien Dumoulin-Smith; Michael Weinstein; Paul Zimbardo.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Duke Energy[2, 4, 5, 6a, 6b, 7, 16]	DUK.N	Neutral	N/A	US$69.81	21 Dec 2015

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

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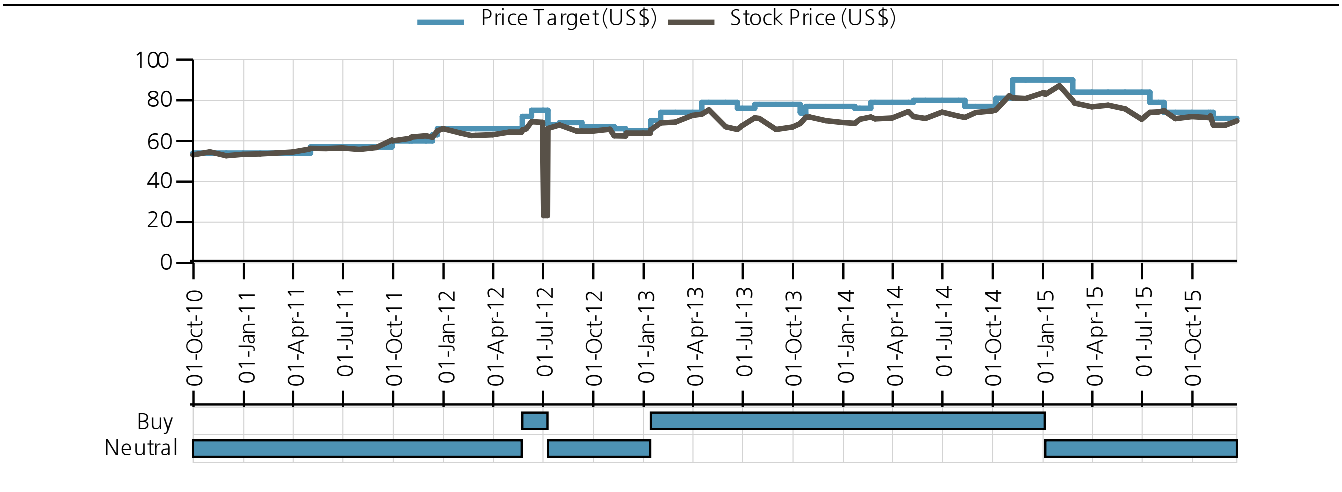
Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

Duke Energy (US$)



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