

Avista Corp

Expecting Some Runoff

Downgrade to Sell on valuation as 10% smid-bid premium persists

Our downgrade is based solely on what we view as an unsustainable ~10% premium to small/medium cap (SMid) regulated utility peers, given its average earnings growth rate of 4%-5% with little benefit from bonus depreciation to offset future equity needs. AVA had been trading in-line with peers through early Sept 2015, and appears to have captured investor attention around the same time that Emera announced its takeover offer for fellow SMid utility TECO Energy (TE) at a 48% premium to its unaffected price. Then in Oct 2015, DUK announced its acquisition of Piedmont Nat Gas (PNY) at a 40% premium as well. We emphasize that Avista continues to be run well with a solid management team and improving regulatory treatment.

Regulatory progress has been impressive but structural lag still exists

With revenue weather-decoupling now achieved in Washington and Idaho throughout most of its service territories, this previous source of seasonal earnings volatility has been virtually eliminated. While this achievement is impressive, we also take note of Avista's multi-state jurisdiction coupled with historic test years that have required nearly annual ratecases to keep up with 60-70 bps of structural regulatory lag. These characteristics continue to argue in favor of AVA as an acquirer rather than a seller, as the 2014 acquisition of Alaskan utility AEL&P supports.

Salix selected as "top ranked project" for Fairbanks LNG

On March 3rd, Salix was selected as the [top-ranked proposal](#) for the [Fairbanks LNG Interior Energy Project](#), with project authorization expected on March 31st and a final investment decision by June 23rd. The ~\$110M opportunity is worth a more modest \$20M equity for Salix, with another \$40M from the state (AIEDA) and \$50M in project loans. Separately, the company's plan to develop a gas utility with LNG import capability at Juneau appears to be delayed by the impact of low oil prices on both the local economy and the spread vs natural gas pricing.

Valuation: D/g to Sell on valuation, even as PT raised to \$36 on higher peer P/E

Our estimates are unchanged. We roll our valuation forward to a 2018E peer utility P/E and raise our price target \$3 to \$36 for a sharply higher average peer P/E ratio, now at 16.3x 2018E vs only 14.8x when we last marked this to market.

Equities

Americas
Electric Utilities

12-month rating **Sell**
Prior: Neutral
12m price target **US\$36.00**
Prior: US\$33.00
Price **US\$40.32**
RIC: AVA.N **BBG:** AVA US

Trading data and key metrics

52-wk range US\$40.32-29.93

Market cap. US\$2.43bn

Shares o/s 60.2m (COM)

Free float 99%

Avg. daily volume ('000) 120

Avg. daily value (m) US\$4.5

Common s/h equity (12/16E) US\$1.63bn

P/BV (12/16E) 1.6x

Net debt / EBITDA (12/16E) 3.7x

EPS (UBS, diluted) (US\$)

	12/16E	
	UBS	Cons.
Q1E	1.09	0.97
Q2E	0.43	0.43
Q3E	0.15	0.19
Q4E	0.39	0.51
12/16E	2.06	2.05
12/17E	2.13	2.16
12/18E	2.22	2.22

Julien Dumoulin-Smith

Analyst

julien.dumoulin-smith@ubs.com

+1-212-713 9848

Michael Weinstein

Associate Analyst

michael.weinstein@ubs.com

+1-212-713 3182

Paul Zimbardo

Associate Analyst

paul.zimbardo@ubs.com

+1-212-713 1033

Highlights (US\$m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Revenues	1,625	1,473	1,485	1,779	1,824	1,874	1,926	1,977
EBIT (UBS)	251	264	263	291	306	324	344	361
Net earnings (UBS)	111	120	118	130	137	146	155	163
EPS (UBS, diluted) (US\$)	1.85	1.93	1.89	2.06	2.13	2.22	2.33	2.42
DPS (US\$)	1.22	1.27	1.33	1.38	1.44	1.51	1.57	1.59
Net (debt) / cash	(1,361)	(1,626)	(1,575)	(1,605)	(1,719)	(1,833)	(1,932)	(2,013)
Profitability/valuation	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
EBIT margin %	15.4	17.9	17.7	16.4	16.8	17.3	17.8	18.2
ROIC (EBIT) %	8.3	8.1	7.5	8.2	8.2	8.2	8.3	8.4
EV/EBITDA (core) x	8.6	9.6	9.8	10.0	9.7	9.1	8.6	8.2
P/E (UBS, diluted) x	14.6	16.4	17.7	19.6	18.9	18.1	17.3	16.7
Equity FCF (UBS) yield %	(3.3)	(7.3)	(0.9)	4.1	(3.0)	(2.0)	13.7	14.5
Net dividend yield %	4.5	4.0	4.0	3.4	3.6	3.7	3.9	3.9

Source: Company accounts, Thomson Reuters, UBS estimates. UBS adjusted EPS is stated before goodwill-related charges and other adjustments for abnormal and economic items at the analysts' judgement. Valuations: based on an average share price that year, (E): based on a share price of US\$40.32 on 17 Mar 2016 19:40 EDT

www.ubs.com/investmentresearch

This report has been prepared by UBS Securities LLC. **ANALYST CERTIFICATION AND REQUIRED DISCLOSURES BEGIN ON PAGE 17.** UBS does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

PIVOTAL QUESTIONS

Q: Can Avista achieve longer multi-year rateplans for its utilities?

With 60-70 bps of typical structural rate lag, frequent ratecases have been the norm, usually every year. However, occasionally, longer rateplans (up to 2 years) have been filed and the Washington utility recently filed an 18-month plan in Feb 2016 (the extra six months is actually an attempt to de-synchronize ratecases across jurisdictions in Idaho and Oregon). With weather revenue decoupling now achieved in Washington and Idaho (90% of ratebase), we see longer rateplans with less regulatory lag as the next frontier for regulatory improvement.

[more](#) →**Q: Will Avista succeed in expanding LNG and gas utility infrastructure in Alaska and beyond?**

This seems unlikely in the near-medium term as proposals to develop a new gas utility for oil-heavy Juneau remain largely stalled as a result of low oil prices, which are now competitive with LNG re-gas and also hurting the Alaska economy, reducing desire for large infrastructure growth projects.

[more](#) →**Q: What is the potential growth opportunity for unregulated LNG solutions business Salix?**

Besides the recent win in Fairbanks, we think other potential LNG transportation customers may be holding-off to evaluate needs after both the drop in global oil prices and to see how the EPA's Clean Power Plan (stayed by the Supreme Ct) shapes electric fuel costs and requirements.

[more](#) →

UBS VIEW

With the acquisition of Alaska utility AEL&P and sale of nonregulated Ecova in 2014, the company is now virtually 100% regulated and the focus going forward will be rate attrition at its utilities in Washington, Idaho, Oregon, and now Alaska. Management's 4%-5% long-term earnings growth target remains based primarily on steady customer and systems growth with no large risky projects planned through at least 2018. Also worth watching is the nascent non-regulated LNG/CNG services subsidiary Salix, Inc., as well as any other strategic opportunities taken up. Aside from the recent win in Fairbanks for the Interior Energy Project (~\$20M equity investment), no other specific projects have been identified yet, and we await management's strategic goals for it in terms of size, investment, and earnings growth.

EVIDENCE

The most recent capital plan for 5%-6% ratebase growth is not substantially changed from prior forecasts. Most of the 2016-2018 spending is focused on transmission and distribution work along with info tech upgrades. This drives 4%-5% average annualized EPS growth for the next few years.

WHAT'S PRICED IN?

Avista now trades at an unsustainable 10% premium to small/medium cap (smid) regulated utility peers, given its average earnings growth rate of 4%-5% with little benefit from bonus depreciation to offset future equity needs. Outperformance since Sept 2015 appears to coincide with the acquisition of other small/mid-cap utilities at 40%-50% premiums.

[more](#) →

UPSIDE / DOWNSIDE SPECTRUM

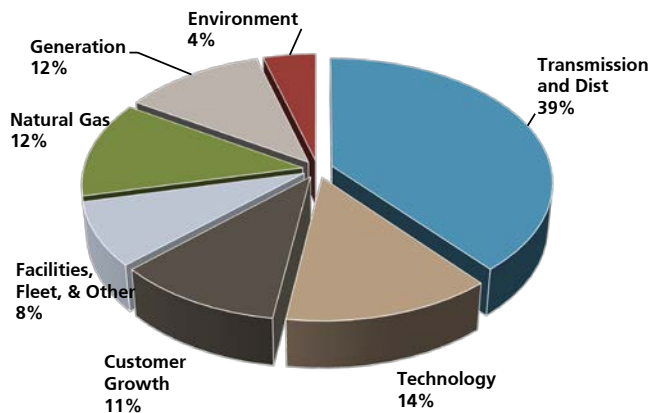
[more](#) →

COMPANY DESCRIPTION

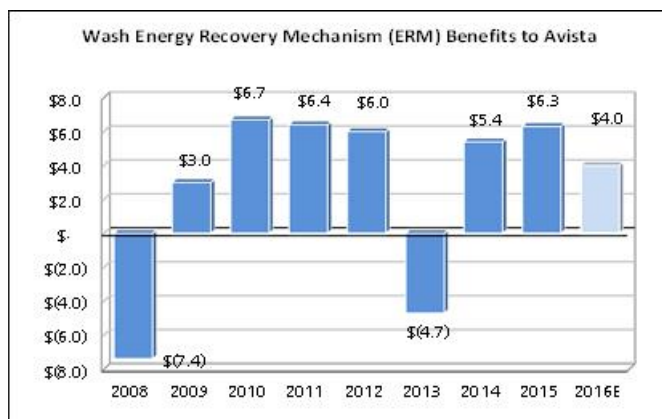
AVA's regulated utility operation provides retail electric services to approximately 382k electric and 326k gas customers in eastern Washington, northern Idaho, Oregon, and Alaska. The company also formed Salix, Inc. to explore opportunities in non-regulated LNG and CNG projects.

[more](#) →

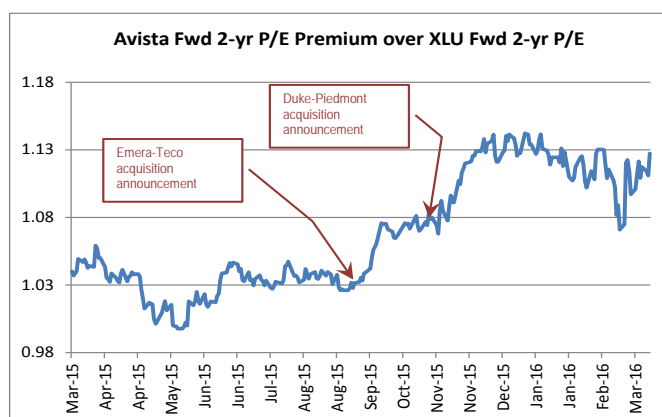
OUR THESIS IN PICTURES

[return](#) ↑

...AVA plans to invest \$1.2B from 2016-2018 across its regulated utility system, focusing on steady 5%-6% ratebase growth through transmission and distribution spending as well as information technology. No large risky projects are currently planned. This drives an industry-average 4%-5% earnings growth.



... The Energy Recovery Mechanism (ERM) in Washington allows the company to keep some of the benefit from lower-cost energy when hydroelectric conditions are favorable. So far, the ERM is on track to show a benefit between \$0 and \$4M in 2016.



Back to recent highs... AVA began trading at a significant premium to other peer utilities at about the same time as other SMid-cap acquisition announcements, including Emera-TECO (at a 48% premium) in Sept 2015 and Duke-Piedmont (40%) in Oct 2015. The Feb 2016 announcements for Fortis-ITC (33% to Nov '15 price) and Algonquin-Empire (21%) have also been notable.

Sources for exhibits above: Company data, UBS Research, FactSet

PIVOTAL QUESTIONS

[return](#) ↑**Q: Can Avista achieve longer multi-year rate plans for its utilities?**

UBS VIEW

With 60-70 bps of typical structural rate lag, frequent rate cases have been the norm, usually every year. However, occasionally, longer rate plans (up to two years) have been filed and the Washington utility recently filed an 18-month plan in Feb 2016 (the extra six months is actually an attempt to de-synchronize rate cases across jurisdictions in Idaho and Oregon). With weather revenue decoupling now achieved in Washington and Idaho (90% of ratebase), we see longer rate plans with less regulatory lag as the next frontier for regulatory improvement.

EVIDENCE

A new rate filing in Washington was filed on Feb 19th that includes an 18-month rate plan with a two-phase rate increase, rather than the usual 1-year plan. In the context of recent approvals for decoupling in all major jurisdictions (Wash, Idaho, Oregon), we see an overall improving regulatory situation.

WHAT'S PRICED IN?

At the current 10% premium, all recent improvements to regulatory treatment are seemingly priced in, as are several further improvements not yet achieved, such as the elimination of 60-70 bps of regulatory lag, future test years, and multi-year rate plans.

New 18-month rate plan filed in Washington

- **Rate decrease approved for Washington; approving attrition allowances within rates.** The partial settlement in May 2015 set a 9.5% ROE on 48.5% but left ratebase, O&M, and historic test year attrition on the table for the litigated process. The final order on Jan 6th, 2016 approves \$1.3B electric ratebase and \$264M gas ratebase (vs AVA request of \$1.5B and \$286M, respectively), with a final electric rate decrease of only -\$8.1M instead of the ALJ proposal for -\$8.7M. The improvement is to recognize the need for revenues to offset historic test year attrition. Similarly, on the gas side, the approved increase was \$10.8M instead of the ALJ's \$10.0M. Rates went into effect on January 11th.
- **A new Washington ratecase was filed on Feb 19** for a 9.9% ROE on 48.5% equity and an 18-month rate plan. Under the plan, AVA is requesting new rates on January 1st 2017 (\$38.6M elec and \$4.4M gas) followed by a second step-up in 2018 (\$10.3M elec and \$0.9M gas), with a rate increase stayout stipulating no new rate filing for rates effective prior to July 1, 2018.

Attrition allowances are now embedded in Washington rates.

- **Ratecase settlement approved in Idaho brings decoupling to nearly all jurisdictions.** The increase in revenue is based on a 9.5% ROE, with annual electric revenues increased by \$1.7M (0.7%) and gas increased by \$2.5M (3.5%). Rates went into effect on January 1, 2016. The key takeaway is the inclusion of decoupling mechanisms for both electric and gas, with AVA now decoupled in Washington, Idaho, and Oregon (more than 90% of total ratebase). Major capital projects in the filing include the multi-year redevelopment of the Little Falls and Nine Mile powerhouses, the replacement of IT infrastructure, and continued gas distribution line replacement. The request also includes a proposed electric and natural gas Fixed Cost Adjustment (FCA) mechanism (decoupling), where revenues would be adjusted each month based on the number of customers, rather than kilowatt-hour and therm sales, with surcharges and rebates to customers in the following year.
- **Gas rates were approved in Oregon on Feb 29th** for a \$4.5M rate increase and 9.4% ROE and 50% equity (vs the original request for \$8.6M based on a 9.9% ROE and 50% equity). The order also includes the company's requested decoupling mechanism, whereby the company's natural gas revenues would be adjusted each month to reflect revenues based on the number of customers, rather than therm sales, with surcharges and rebates to customers in the following year.
- **A new elec/gas Idaho ratecase** is expected to be filed in 1H16.
- **Frequent rate filings have been the norm** as a result of the application of historic test years, we expect to hear from management whether the extra revenues granted would change that situation. *AVA remains long generating capacity and will not need another CT until 2020 (followed by another in 2023).*
- **No intermediate need for a ratecase in Alaska,** although management will continue to evaluate.

The key takeaway is the inclusion of decoupling mechanisms for both electric and gas, with AVA now decoupled in Washington, Idaho and Oregon (over 90% of total ratebase).

What else is driving utility earnings growth?

Favorable precipitation should benefit the ERM

Snowpack has so far been heavy this winter as a result of the El Nino effect, and there is still another six weeks of high-level snow accumulation possible. So far, the Northwest River Forecast Center predicts 86% water supply runoff from April through September for the Clark Fork River (where 75% of AVA's hydro depends upon) and 80% for the Spokane River. Depending on the timing of melt-off later this Spring (among many other power fleet factors), this is likely to have a positive effect on earnings from the Energy Recovery Mechanism (ERM). At this time, AVA expects to finish 2016 within the \$4M benefit dead-band (i.e., no sharing of benefits up to \$4M pretax). Importantly, none of this possible benefit is embedded within 2016 guidance. In the table below, we show our estimate of how a \$4M benefit might be distributed quarterly throughout 2016 (based roughly on historical results). In comparison, recall that warm weather in 1H15 caused a more rapid melt-off of snowpack vs. 1H14, when cold temperatures kept much of the snow frozen through to Spring. As a result of this, ERM benefits were significantly lower than normal in 1Q14 (with benefits pushed into 2Q14), while the rapid melt boosted 1Q15 benefits as more hydroelectric power was available for sale. For full year 2015, benefits exceeded \$10M pretax, although under the dead-band sharing mechanism, the ERM mechanism reached the 90%/10% sharing band, leaving the

Importantly, none of this possible benefit is embedded within 2016 guidance.

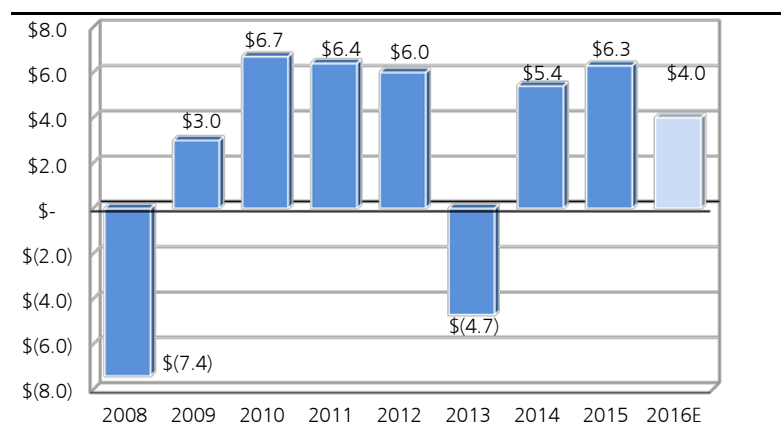
company's share at \$6.3M overall, with the remainder refunded back to customers. We emphasize that ERM results are heavily dependent on natural gas pricing and fleet dispatch decisions in addition to hydro conditions.

Figure 1: ERM Mechanism Earnings Impact (\$M), 1Q12A-4Q16E (UBSe)

ERM Mechanism Earnings Impact (\$M) (pretax)	2012A	2013A	2014A	2015A	2016E	Notes
1Q	4.2	3.1	1.3	5.7	2.5	Cold weax in 1Q14 (low melt). Heavy melt 1Q15.
2Q	0.9	1.0	3.6	-	0.9	Below normal precipitation 2Q15
3Q	0.8	1.9	0.4	(0.1)	0.5	Expect below normal hydro May-Aug 2015
4Q	0.1	(10.7)	0.1	0.7	0.1	Colstrip outage 4Q13
Yearend total	\$ 6.0	\$ (4.7)	\$ 5.4	\$ 6.3	\$ 4.0	Expect to be within the \$4M benefit deadband in '16

Source: Company filings, UBS estimates

Figure 2: ERM Earnings Impact, 2008-2016E

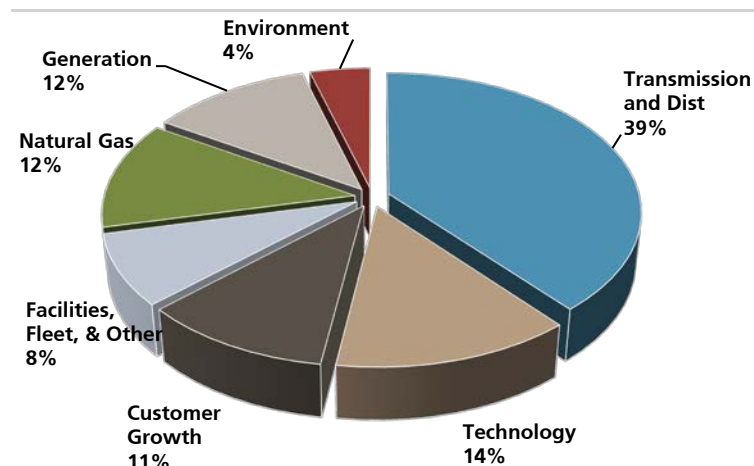


Source: Company filings, UBS estimates

Capital plan extended to 2018 with focus on T&D and IT

The most recent capital plan is not substantially changed from prior forecasts, with an extension to \$423M of spending in 2018 vs \$418M in 2017. Most of the 2016-2018 spending is focused on transmission and distribution work, with \$160M devoted to information technology upgrades. Management continues to project 5%-6% ratebase growth.

Figure 3: AVA Capital Spending Forecast, 2016E-2018E



Source: Company filings

Figure 4: AVA Capital Spending Forecast, 2015A-2018E

AVA Capex								Total
Avista Utilities	<u>2015E - old</u>	2015A - new	<u>2016E - old</u>	2016E - new	<u>2017E - old</u>	2017E - new	2018E - new	2016E-2018E
Transmission and Dist	\$121	\$136	\$131	\$131	\$146	\$151	\$178	\$460
Technology	54	55	51	51	53	53	56	160
Customer Growth	39	50	43	43	43	43	42	128
Facilities, Fleet, & Other	39	48	29	29	30	30	39	98
Natural Gas	47	49	47	47	56	56	45	148
Generation	53	71	52	52	54	54	33	139
Environment	22	6	22	22	18	18	12	52
Total Avista Utilities Capex	\$375	\$415	\$375	\$375	\$400	\$405	\$405	\$1,185
AEL&P Capex	\$14	\$13	\$18	\$17	\$13	\$13	\$18	\$48
Total AVA Capex	\$389	\$428	\$393	\$392	\$413	\$418	\$423	\$1,233

Source: Company filings

For further context, please refer to our recent notes:

[2/26/16 Aiming for a Longer Rateplan](#)

[8/7/15 Steady Progress on Rate Cases](#)

[5/7/15 Hydraulic Earnings Lift](#)

[3/2/15 Another Wet One?](#)

[12/22 Upgrade note "Moving Back to Neutral After the Noise"](#)

[12/19/14 The 'Smid Bid': The Context for Regulated M&A](#)

PIVOTAL QUESTIONS

[return](#) ↑**Q: Will Avista succeed in expanding LNG and gas utility infrastructure in Alaska and beyond?****UBS VIEW**

This seems unlikely in the near/medium-term as proposals to develop a new gas utility for oil-heavy Juneau remain largely stalled as a result of low oil prices, which are now competitive with LNG re-gas.

EVIDENCE

Low oil prices have also slowed the Alaskan economy which reduces headroom in rates for large infrastructure projects. In any event, management reports that a regulatory mechanism for recovery has not yet been agreed upon.

WHAT'S PRICED IN?

At the current 10% premium, the Juneau project appears to be 100% priced in, as is a material portion of future Alaskan growth.

LDC opportunity in Juneau moving slowly amid lower oil prices**Unlikely to happen near term**

AVA has proposed development of a local gas distribution utility in Juneau, Alaska, which would move the city away from its current reliance on diesel/elec for heating and diesel for electric generation. If approved, the company had been expected to move forward in 1H16. However, given the lower (more competitive) price of oil, the financial justification for customers to switch is somewhat eroded at this time. Furthermore, low oil prices have slowed the Alaskan economy and thus reduce headroom in rates for large infrastructure projects. In any event, management reports that no regulatory mechanism for recovery of an investment has yet been agreed upon. Should progress resume, management expects to invest \$130M in the project over 10 years, with the first two years (ideally 2016-2018) of construction being slightly dilutive to earnings, and turning accretive by the 3rd construction year (~2019). By year 5 (~2021), or 3rd year in operation, AVA anticipates the project would be \$0.05 accretive. To be successful, AVA intends to pursue a combination of low cost debt financing through the Alaska Industrial Development and Export Authority (AIDEA) and potential state/local funding to support customer conversion costs.

The unemployment rate in Alaska was 6.6% in January 2016 versus 6.4% in January 2015 reversing a string of improving employment since the financial crisis. The Alaska Department of Labor and Workforce Development specifically cited job losses in oil/gas and construction as a key negative factor offsetting improvement in other areas of the economy.

PIVOTAL QUESTIONS

[return](#) ↑**Q: What is the potential growth opportunity for unregulated LNG infrastructure solutions business Salix?****UBS VIEW**

Besides the recent win in Fairbanks, we think other potential LNG transportation customers may be holding-off to evaluate needs after both the drop in global oil prices and to see how the EPA's Clean Power Plan (stayed by the Supreme Court) shapes electric fuel costs and requirements.

EVIDENCE

Although Salix was selected as the preferred solution for the Fairbanks LNG Interior Energy Project, this is the first significant project for the company since it was formed in 2014. We expect growth to proceed slowly given the strong price competition from cheaper oil vs LNG solutions over the past year.

WHAT'S PRICED IN?

It is unlikely that the market is pricing in any material expectation for Salix, even at the current 10% premium for AVA stock.

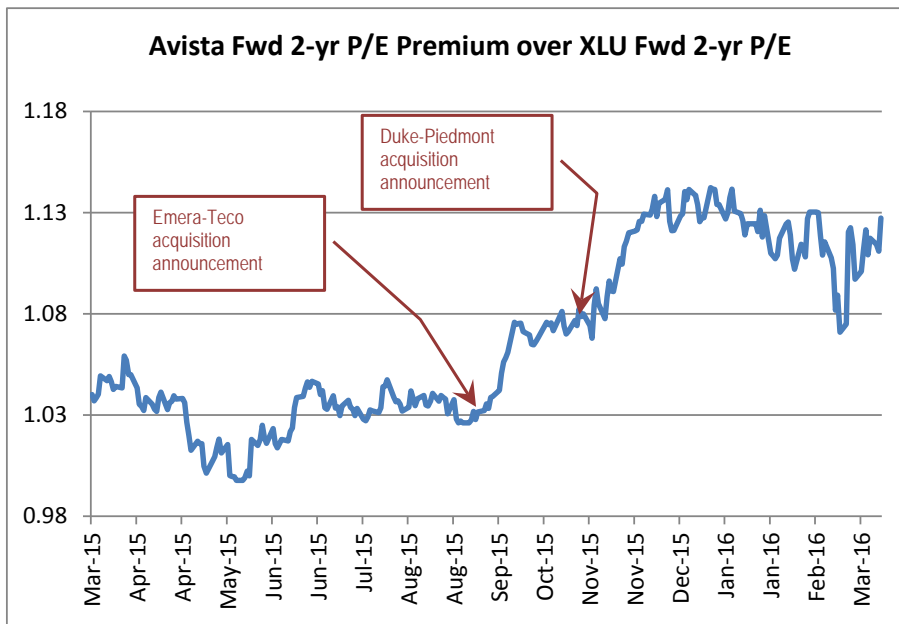
Salix selected as "top ranked project" for Fairbanks LNG

On March 3rd, Salix was selected as the [top-ranked proposal](#) for the [Fairbanks LNG Interior Energy Project](#), with project authorization expected on March 31st and a final investment decision by June 23rd. The ~\$110M opportunity is worth a more modest \$20M equity for Salix, with another \$40M from the state (AIEDA) and \$50M in project loans.

Otherwise, we think other potential LNG transportation customers may be holding-off to evaluate needs after both the drop in global oil prices and to see how the EPA's latest Clean Power Plan shapes electric fuel costs and requirements (assuming the current Supreme Court's stay of the order is lifted).

Further opportunities may eventually exist to ship LNG to other parts of southeast Alaska as part of a conversion strategy away from diesel, especially considering poor hydroelectric conditions of late. AVA has also discussed opportunities for marine fuelling and bunkering and for transportation in Western North America.

WHAT'S PRICED IN?

[return](#) ↑

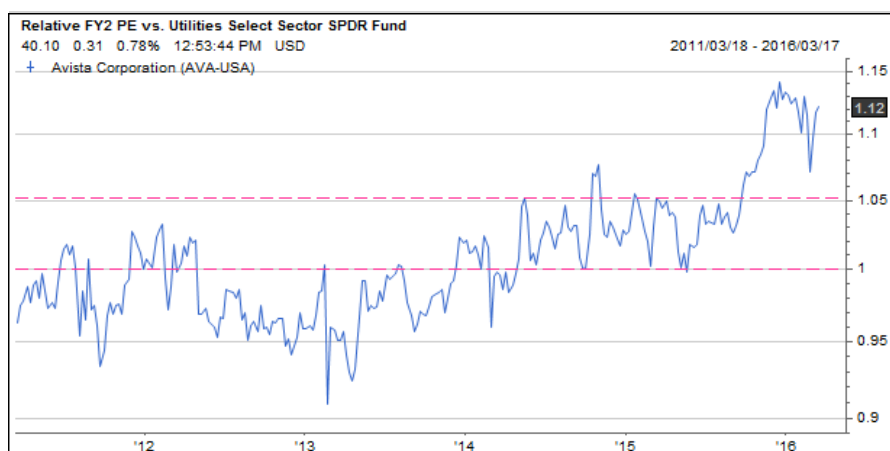
Source: Company Data, UBS Research, FactSet

AVA currently trades at a ~10% premium, well above fair value given an average 4%-5% earnings growth projection.

M&A premium is not supported by AVA's average growth rate

Avista trades at an unsustainable ~10% premium to small/medium cap (SMid) regulated utility peers, given its average earnings growth rate of 4%-5% with little benefit from bonus depreciation to offset future equity needs. AVA had been trading in-line with peers through early Sept 2015, and appears to have caught attention around the same time that Emera announced its takeover offer for fellow SMid utility TECO Energy at a 48% premium to its price at the time. Then in Oct 2015, DUK announced its acquisition of Piedmont Nat Gas at a 40% premium as well. We also note other SMid-cap announcements of late, including the Feb 2016 announcements for Fortis-ITC (33% to Nov '15 price), and Algonquin-Empire (21%).

Figure 5: Multi-Year View of AVA Forward P/E Premium vs XLU



Source: Company Data, UBS Research, FactSet

From May 2014 through September 2015 AVA traded at an in-line forward P/E or 5% premium but it has

Comparing recent transactions

Please see our recent [2/23/16 note "Searching for Clues in Utility M&A"](#) for further discussion of these transactions.

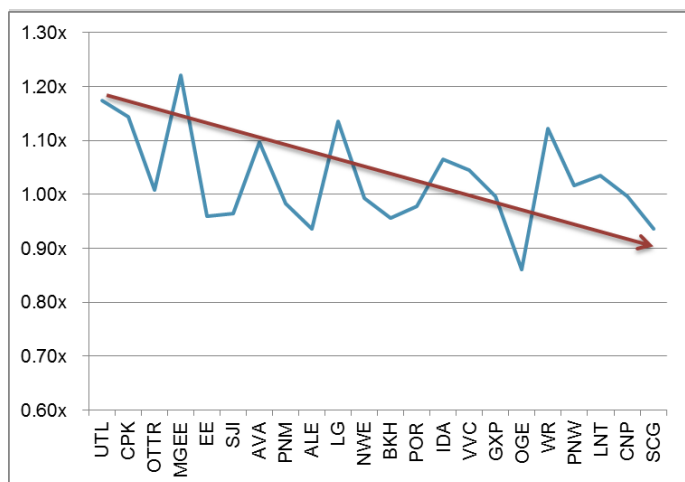
Figure 6: Recent Utility M&A Transactions

Deal	Deal Announcement	Stated Deal Equity Value (\$mn)	Implied 2016 P/E	Implied 2017 P/E	Target Regions
DUK-PNY	10/26/2015	4,795	30.0x	26.9x	North Carolina, Tennessee, South Carolina
EMA - TE	9/4/2015	6,506	23.7x	21.7x	Florida
SO - AGL	8/24/2015	7,943	22.0x	21.4x	Illinois, Georgia, Virginia, New Jersey, Florida, Tennessee, Maryland
AQN-EDE	2/9/2016	1,492	22.6x	21.0x	Missouri, Kansas, Oklahoma, Arkansas
IBE - UIL	2/26/2015	2,983	21.6x	20.4x	Connecticut / Western Massachusetts
FTS-ITC	2/9/2016	6,961	22.0x	20.1x	Iowa, Illinois, Kansas, Missouri, Oklahoma, Wisconsin
Macq - CNL	10/20/2014	3,342	22.1x	20.1x	Louisiana
D-STR	2/1/2016	4,404	18.7x	18.3x	Utah, Idaho, Wyoming
NEE-HE	12/3/2014	3,643	19.2x	17.3x	Hawaii
EXC-POM	4/30/2014	6,840	19.1x	16.9x	Washington DC, Maryland, New Jersey
WEC-TEG	6/23/2014	5,852	17.8x	16.2x	City of Chicago, Michigan's U.P, Lower Michigan, Minnesota
Average Implied Deal P/E Multiple		4,978	21.7x	20.0x	
Average Implied Deal P/E Multiple (Ex DUK-PNY)			20.9x	19.3x	
US Utilities Average P/E			18.0x	17.0x	

Source: Company Filings, FactSet, SNL Energy, and UBS Estimates; Note: forward multiples as of deal announcement dates

We note for deals inked in 2014 compare best to 2016E P/E multiples, whereas deals penned in 2015 (and first month of 2016) compare best to 2017E. We note the time series does lend itself towards a bias for earlier deals to have cheaper implied values on near years.

Figure 7: 2018E Relative SMid P/E Premiums Sorted by Market Cap



Source: FactSet

Below we show Avista's premium versus peers highlighting that AVA is trading at a material premium over both SMid utilities and the broader comp universe. SMid utilities with market caps under \$3Bn are trading at ~17x 2018E EPS but Avista is still trading at a full 1x-turn premium above even that group (5%).

Figure 8: Small and Mid-Cap Comp Sheet

Company	Tkr	UBS Rating	Market Cap (\$ mill)	Price 3/17/2016	Dividend Yield	P/E			2018E	2018E Rel. P/E
Unitil Corp	UTL	Not Rated	\$572	\$40.75	3.48%	21.0x	19.9x	19.1x	NA	1.17x
Chesapeake Utilities Corp	CPK	Not Rated	\$912	\$59.68	1.93%	19.8x	18.8x	18.7x	NA	1.14x
Otter Tail Corp	OTTR	Not Rated	\$1,061	\$27.92	4.48%	18.0x	17.5x	16.4x	NA	1.01x
MGE Energy	MGEE	Not Rated	\$1,725	\$49.75	2.37%	22.4x	20.9x	19.9x	18.8x	1.22x
El Paso Electric	EE	Not Rated	\$1,742	\$43.04	2.74%	17.2x	16.4x	15.7x	14.6x	0.96x
South Jersey Industries	SJI	Not Rated	\$1,923	\$27.04	3.90%	17.1x	17.1x	15.7x	NA	0.96x
Avista Corp	AVA	Sell	\$2,483	\$39.73	3.45%	19.4x	18.7x	17.9x	NA	1.10x
PNM Resources Inc.	PNM	Not Rated	\$2,668	\$33.49	2.63%	20.5x	17.5x	16.0x	15.6x	0.98x
Allete	ALE	Not Rated	\$2,794	\$56.89	3.66%	17.2x	15.6x	15.3x	NA	0.94x
The LaClede Group	LG	Not Rated	\$2,871	\$66.08	2.97%	19.6x	18.7x	18.5x	16.7x	1.14x
NorthWestern Corp	NWE	Not Rated	\$2,905	\$60.27	3.32%	18.2x	17.5x	16.2x	15.5x	0.99x
Black Hills Corp	BKH	Not Rated	\$2,989	\$58.26	2.88%	19.1x	16.7x	15.6x	15.5x	0.96x
Portland General Electric	POR	Buy	\$3,486	\$39.27	3.06%	17.5x	16.2x	15.9x	14.9x	0.98x
Idacorp, Inc.	IDA	Not Rated	\$3,711	\$73.79	2.76%	19.0x	18.4x	17.4x	NA	1.07x
Vectren Corporation	VVC	Not Rated	\$4,092	\$49.44	3.24%	19.6x	18.3x	17.0x	NA	1.05x
Great Plains Energy	GXP	Not Rated	\$4,844	\$31.37	3.35%	17.9x	17.1x	16.2x	15.3x	1.00x
OGE Energy Corp	OGE	Not Rated	\$5,580	\$27.94	3.94%	15.7x	14.9x	14.0x	NA	0.86x
Westar Energy, Inc.	WR	Neutral	\$6,787	\$47.92	3.17%	19.7x	18.9x	18.3x	17.0x	1.12x
Pinnacle West Capital Corp	PNW	Neutral	\$8,056	\$72.57	3.44%	18.2x	17.3x	16.6x	16.1x	1.02x
Alliant Energy Corp.	LNT	Not Rated	\$8,185	\$72.14	3.26%	19.1x	17.9x	16.9x	16.2x	1.04x
CenterPoint Energy Inc.	CNP	Not Rated	\$8,971	\$20.85	4.94%	18.3x	17.4x	16.3x	15.6x	1.00x
SCANA Corp.	SCG	Neutral	\$9,654	\$67.55	3.40%	17.0x	16.2x	15.3x	14.7x	0.94x
SMid Average					3.36%	18.7x	17.6x	16.8x	15.9x	
SMid Median					3.26%	18.6x	17.5x	16.3x	15.6x	
All Utilities Average					3.42%	18.0x	17.0x	16.3x	15.3x	
Avista Corp						19.4x	18.7x	17.9x		
Premium Over SMid Median						4%	7%	10%		
Premium Over All Utilities						8%	10%	10%		

Source: FactSet for all except UBS Rated stocks

UPSIDE / DOWNSIDE SPECTRUM

[return](#) ↑

AVA is trading
at US\$39.79
(as of March 16th).

Risk to the current share price is heavily skewed (1:6) to the downside

AVA is trading at **US\$39.79** (as of March 16th).

Upside (US\$41): Our upside case is based on the elimination of all 60-70 bps of structural regulatory lag under forward-looking multi-year rate plans in all jurisdictions. It also assumes a significant ramp-up of ratebase and earnings growth to a best-in-class 8% or better, in part through an aggressive expansion in Alaska. The upside case assumes the global market for LNG (and oil) recovers, with Salix growing at a rate faster than the utility. We also note that it is based on an 18.3x P/E, with higher recent takeout premiums for other SMid-cap utilities: Fortis-ITC at 19.3x (when announced), Algonquin-Empire at 22.4x, Emera-TECO at 21.2x, Iberdrola USA-UIL at 20.5x, and Macquarie-CNL at 20.4x

Base (US\$36): Our base case is based on continued 60-70 bps of structural regulatory lag, with earned ROEs in the high 8s to low 9s driving 5%-6% ratebase growth and 4%-5% earnings growth. We assume no meaningful upside growth from plans to build out a \$130M gas utility in Juneau or similar initiatives dependent on attractive relative pricing between LNG/gas and oil. We also assume no meaningful growth at Salix either.

Downside (US\$32): Our downside case assumes a degradation in regulatory treatment across the Washington and Idaho jurisdictions (90% of ratebase), with earned ROEs at 8% or below. It also assumes earnings growth drops materially.

Figure 9: AVA 2018E P/E Valuation – No Premium to Group Applied

Avista P/E Valuation (2018E)		Low Case		Base Case		High Case	
		Multiple	\$Mn	Multiple	\$Mn	Multiple	\$Mn
				Peer	16.3 x		
Consolidated Net Income	\$146	14.3 x	\$2,084	16.3 x	\$2,375	18.3 x	\$2,667
Fully Diluted Outstanding Shares (2018E)			65.6		65.6		65.6
AVA Equity Value per Share			\$32.00		\$36.00		\$41.00

Source: Company Filings, FactSet, and UBS Estimates

Estimates unchanged; PT raised \$3 on higher peer P/E multiple

Our estimates are unchanged. We are rolling our valuation forward to a 2018E peer utility P/E and raise our PT \$3 to \$36 for a sharply higher average peer P/E ratio, now at 16.3x 2018E vs only 14.8x when we last marked this to market. Our 2016 estimate remains based on an 8.9% ROE and \$55M of equity raised this year, along with an expected benefit from the ERM mechanism (up to \$0.04 at the top end of the \$4M deadband). We are maintaining our 2017-2019 estimates (also an 8.9% ROE), which now reflect a 4.2% EPS CAGR off the \$2.06 midpoint of 2016 guidance (vs management's target for 4%-5% earnings and dividend growth).

Debt/Equity for 2016

The December 2015 issuance of \$100M in 30-year mortgage bonds at 4.37% is **expected to be followed by a 2016** issuance of \$155M in long-term debt (including the refinancing of \$90M of long-term debt maturing in 3Q16) and \$55M in common stock based upon management's guidance. The consolidated equity ratio at year-end 2015 was 46.9%.

\$55M equity planned for 2016

Figure 10: AVA 2016 Guidance vs UBSe and Consensus

2016 Guidance			
	Low	High	Midpoint
Avista Utilities	\$1.91	\$2.05	\$1.98
AEL&P	\$0.09	\$0.13	\$0.11
Other	(\$0.04)	(\$0.02)	(\$0.03)
Consolidated	\$1.96	\$2.16	\$2.06
Avista Utilities ROE guidance	8.6%	9.2%	8.9%
Incremental items not included in guidance:			
Weather YTD w/decoupling	\$0.00	\$0.00	\$0.00
ERM expectation (UBSe)	\$0.04	\$0.04	\$0.04
UBSe			\$2.06
Consensus			\$2.05

Source: Company Filings, FactSet, and UBS Estimates

Figure 11: UBS Estimates for AVA, 2014A-2019E – Consistent 4% EPS growth

AVA	2014A	2015E	2016E	2017E	2018E	2019E
Segment EPS						
Avista Utilities (WA, ID, OR)	\$1.83	\$1.81	\$1.97	\$2.04	\$2.13	\$2.23
AEL&P Utility (AK)	\$0.05	\$0.11	\$0.11	\$0.11	\$0.12	\$0.13
Ecova						
Other	\$0.05	(\$0.03)	(\$0.03)	(\$0.03)	(\$0.03)	(\$0.03)
UBS Estimates	\$1.93	\$1.89	\$2.06	\$2.13	\$2.22	\$2.33
Prior UBS estimate	\$1.93	\$1.89	\$2.06	\$2.13	\$2.22	\$2.33
Consensus		\$1.97	\$2.05	\$2.13	\$2.22	
Guidance			\$1.96-\$2.16			
EPS CAGR Implied off 2016 guidance midpoint \$2.06 (LT guidance 4%-5%)						
						4.2%
ROE Earned at Utility (8.6%-9.2%, including 60-70 bps req lag)			8.9%	8.9%	8.9%	8.9%

Source:

COMPANY DESCRIPTION

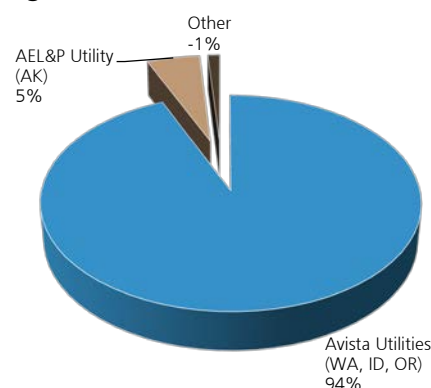
[return](#) ↑

Market Cap	US\$2.5bn
Shares Outstanding	63m (COM)
Industry and outlook	Regulated utilities
Region	Americas
Website	www.avistacorp.com

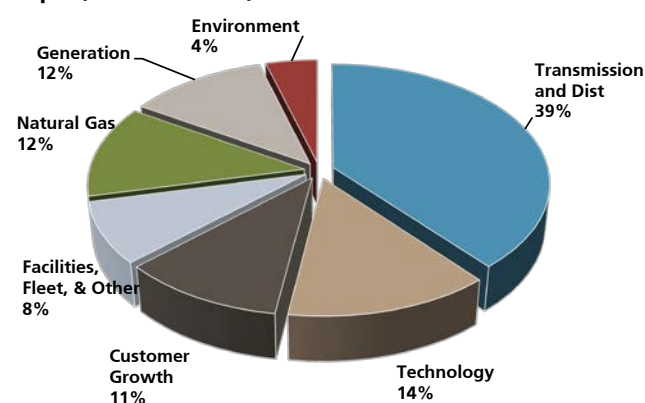
Avista Corporation is an energy company consisting of regulated electric and natural distribution as well as several unregulated, energy-focused businesses. Its regulated utility operation provides retail electric services to approximately 382,000 customers in eastern Washington, northern Idaho, and Alaska and the natural gas distribution unit provides services to 326,000 customers in Washington, Idaho, Oregon. The company also formed its Salix, Inc. subsidiary to explore opportunities in non-regulated LNG and CNG projects.

Industry outlook

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

EPS by Segment, 2018E (%)

Source: Company Filings and UBS Estimates

Capex, 2016E-2018E, \$1.2B

Source: Company filings

Forecast returns

Forecast price appreciation	-10.7%
Forecast dividend yield	3.5%
Forecast stock return	-7.2%
Market return assumption	5.9%
Forecast excess return	-13.1%

Valuation Method and Risk Statement

Risks to the investment thesis include but are not limited to: 1) adverse political/legal/environmental/regulatory changes; 2) potential inability to achieve its stated capital expenditures, ratebase, and earnings profile; 3) unfavorable weather and natural resources yield; 4) operational and construction risk; 5) inability to access the capital markets on attractive terms; 6) declines in customer demand and population; 7) failure to close pending or prospective M&A transactions; 8) natural disasters; 9) cyber security attacks; 10) changes to dividend policy; 11) unfavorable crude, natural gas, and LNG prices that make LNG offering less economic; 12) acquisition of company by third party; and (13) other unforeseen changes.

Valuation is based on a P/E methodology.

Required Disclosures

This report has been prepared by UBS Securities LLC, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

For information on the ways in which UBS manages conflicts and maintains independence of its research product; historical performance information; and certain additional disclosures concerning UBS research recommendations, please visit www.ubs.com/disclosures. The figures contained in performance charts refer to the past; past performance is not a reliable indicator of future results. Additional information will be made available upon request. UBS Securities Co. Limited is licensed to conduct securities investment consultancy businesses by the China Securities Regulatory Commission. UBS acts or may act as principal in the debt securities (or in related derivatives) that may be the subject of this report.

Analyst Certification: Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner, including with respect to UBS, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

UBS Investment Research: Global Equity Rating Definitions

12-Month Rating	Definition	Coverage ¹	IB Services ²
Buy	FSR is > 6% above the MRA.	48%	36%
Neutral	FSR is between -6% and 6% of the MRA.	39%	28%
Sell	FSR is > 6% below the MRA.	12%	22%
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 31 December 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.

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.

Research analysts contributing to this report who are employed by any non-US affiliate of UBS Securities LLC are not registered/qualified as research analysts with FINRA. Such analysts may not be associated persons of UBS Securities LLC and therefore are not subject to the FINRA restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account. The name of each affiliate and analyst employed by that affiliate contributing to this report, if any, follows.

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

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Avista Corp ^{4, 6, 7, 16}	AVA.N	Suspended	N/A	US\$40.32	17 Mar 2016

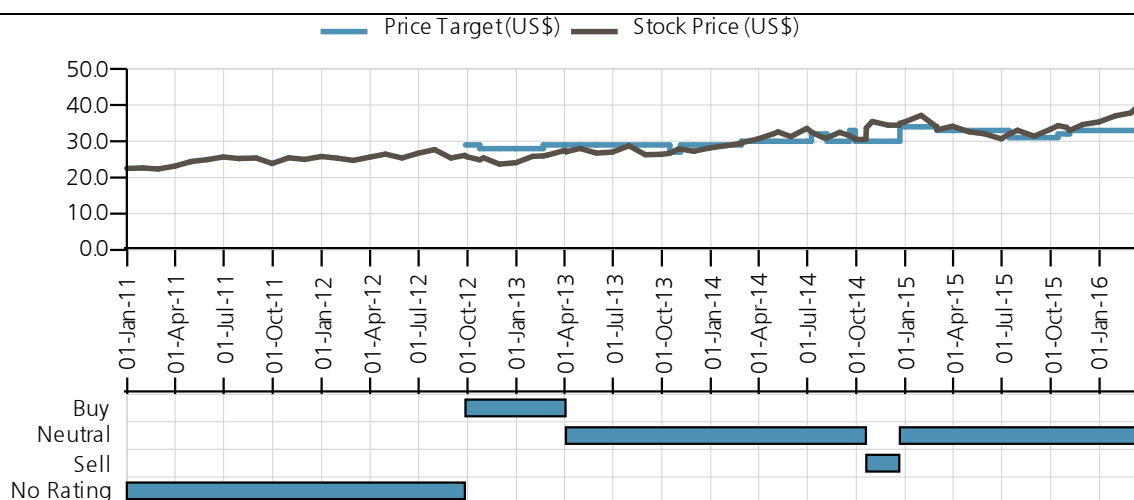
Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

4. Within the past 12 months, UBS AG, its affiliates or subsidiaries has received compensation for investment banking services from this company/entity or one of its affiliates.
6. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and non-securities services are being, or have been, provided.
7. Within the past 12 months, UBS Securities LLC and/or its affiliates have received compensation for products and services other than investment banking services from this company/entity.
16. UBS Securities LLC makes a market in the securities and/or ADRs of this company.

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report. For a complete set of disclosure statements associated with the companies discussed in this report, including information on valuation and risk, please contact UBS Securities LLC, 1285 Avenue of Americas, New York, NY 10019, USA, Attention: Investment Research.

Avista Corp (US\$)



Source: UBS; as of 17 Mar 2016

Global Disclaimer

This document has been prepared by UBS Securities LLC, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

Global Research is provided to our clients through UBS Neo, the UBS Client Portal and UBS.com (each a "System"). It may also be made available through third party vendors and distributed by UBS and/or third parties via e-mail or alternative electronic means. The level and types of services provided by Global Research to a client may vary depending upon various factors such as a client's individual preferences as to the frequency and manner of receiving communications, a client's risk profile and investment focus and perspective (e.g. market wide, sector specific, long-term, short-term, etc.), the size and scope of the overall client relationship with UBS and legal and regulatory constraints.

When you receive Global Research through a System, your access and/or use of such Global Research is subject to this Global Research Disclaimer and to the terms of use governing the applicable System.

When you receive Global Research via a third party vendor, e-mail or other electronic means, your use shall be subject to this Global Research Disclaimer and to UBS's Terms of Use/Disclaimer (<http://www.ubs.com/global/en/legalinfo2/disclaimer.html>). By accessing and/or using Global Research in this manner, you are indicating that you have read and agree to be bound by our Terms of Use/Disclaimer. In addition, you consent to UBS processing your personal data and using cookies in accordance with our Privacy Statement (<http://www.ubs.com/global/en/legalinfo2/privacy.html>) and cookie notice (<http://www.ubs.com/global/en/homepage/cookies/cookie-management.html>).

If you receive Global Research, whether through a System or by any other means, you agree that you shall not copy, revise, amend, create a derivative work, transfer to any third party, or in any way commercially exploit any UBS research provided via Global Research or otherwise, and that you shall not extract data from any research or estimates provided to you via Global Research or otherwise, without the prior written consent of UBS.

For access to all available Global Research on UBS Neo and the Client Portal, please contact your UBS sales representative.

This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject UBS to any registration or licensing requirement within such jurisdiction. It is published solely for information purposes; it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy. No representation or warranty, either expressed or implied, is provided in relation to the accuracy, completeness or reliability of the information contained in this document ('the Information'), except with respect to Information concerning UBS. The Information is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. UBS does not undertake to update or keep current the Information. Any opinions expressed in this document may change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS. Any statements contained in this report attributed to a third party represent UBS's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party.

Nothing in this document constitutes a representation that any investment strategy or recommendation is suitable or appropriate to an investor's individual circumstances or otherwise constitutes a personal recommendation. Investments involve risks, and investors should exercise prudence and their own judgement in making their investment decisions. The financial instruments described in the document may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates or other market conditions. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument referred to in the document. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

The value of any investment or income may go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. Neither UBS nor any of its directors, employees or agents accepts any liability for any loss (including investment loss) or damage arising out of the use of all or any of the Information.

Any prices stated in this document are for information purposes only and do not represent valuations for individual securities or other financial instruments. There is no representation that any transaction can or could have been effected at those prices, and any prices do not necessarily reflect UBS's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by UBS or any other source may yield substantially different results.

This document and the Information are produced by UBS as part of its research function and are provided to you solely for general background information. UBS has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. In no circumstances may this document or any of the Information be used for any of the following purposes:

- (i) valuation or accounting purposes;
- (ii) to determine the amounts due or payable, the price or the value of any financial instrument or financial contract; or
- (iii) to measure the performance of any financial instrument.

By receiving this document and the Information you will be deemed to represent and warrant to UBS that you will not use this document or any of the Information for any of the above purposes or otherwise rely upon this document or any of the Information.

Research will initiate, update and cease coverage solely at the discretion of UBS Investment Bank Research Management. The analysis contained in this document is based on numerous assumptions. Different assumptions could result in materially different results. The analyst(s) responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS into other areas, units, groups or affiliates of UBS. The compensation of the analyst who prepared this document is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues; however, compensation may relate to the revenues of UBS Investment Bank as a whole, of which investment banking, sales and trading are a part.

For financial instruments admitted to trading on an EU regulated market: UBS AG, its affiliates or subsidiaries (excluding UBS Securities LLC) acts as a market maker or liquidity provider (in accordance with the interpretation of these terms in the UK) in the financial instruments of the issuer save that where the activity of liquidity provider is carried out in accordance with the definition given to it by the laws and regulations of any other EU jurisdictions, such information is separately disclosed in this document. For financial instruments admitted to trading on a non-EU regulated market: UBS may act as a market maker save that where this activity is carried out in the US in accordance with the definition given to it by the relevant laws and regulations, such activity will be specifically disclosed in this document. UBS may have issued a warrant the value of which is based on one or more of the financial instruments referred to in the document. UBS and its affiliates and employees may have long or short positions, trade as principal and buy and sell in instruments or derivatives identified herein; such transactions or positions may be inconsistent with the opinions expressed in this document.

United Kingdom and the rest of Europe: Except as otherwise specified herein, this material is distributed by UBS Limited to persons who are eligible counterparties or professional clients. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. **France:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities France S.A. UBS Securities France S.A. is regulated by the ACPR (Autorité de Contrôle Prudentiel et de Résolution) and the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this document, the document is also deemed to have been prepared by UBS Securities France S.A. **Germany:** Prepared by UBS Limited and distributed by UBS Limited and UBS Deutschland AG. UBS Deutschland AG is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). **Spain:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). **Turkey:** Distributed by UBS Limited. No information in this document is provided for the purpose of offering, marketing and sale by any means of any capital market instruments and services in the Republic of Turkey. Therefore, this document may not be considered as an offer made or to be made to residents of the Republic of Turkey. UBS AG is not licensed by the Turkish Capital Market Board under the provisions of the Capital Market Law (Law No. 6362). Accordingly, neither this document nor any other offering material related to the instruments/services may be utilized in connection with providing any capital market services to persons within the Republic of Turkey without the prior approval of the Capital Market Board. However, according to article 15 (d) (ii) of the Decree No. 32, there is no restriction on the purchase or sale of the securities abroad by residents of the Republic of Turkey. **Poland:** Distributed by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce regulated by the Polish Financial Supervision Authority. Where an analyst of UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce has contributed to this

document, the document is also deemed to have been prepared by UBS Limited (spółka z ograniczoną odpowiedzialnością) Oddział w Polsce. **Russia:** Prepared and distributed by UBS Bank (OOO). **Switzerland:** Distributed by UBS AG to persons who are institutional investors only. UBS AG is regulated by the Swiss Financial Market Supervisory Authority (FINMA). **Italy:** Prepared by UBS Limited and distributed by UBS Limited and UBS Italia Sim S.p.A. UBS Italia Sim S.p.A. is regulated by the Bank of Italy and by the Commissione Nazionale per le Società e la Borsa (CONSOB). Where an analyst of UBS Italia Sim S.p.A. has contributed to this document, the document is also deemed to have been prepared by UBS Italia Sim S.p.A. **South Africa:** Distributed by UBS South Africa (Pty) Limited (Registration No. 1995/011140/07), an authorised user of the JSE and an authorised Financial Services Provider (FSP 7328). **Israel:** This material is distributed by UBS Limited. UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. UBS Securities Israel Ltd is a licensed Investment Marketer that is supervised by the Israel Securities Authority (ISA). UBS Limited and its affiliates incorporated outside Israel are not licensed under the Israeli Advisory Law. UBS Limited is not covered by insurance as required from a licensee under the Israeli Advisory Law. UBS may engage among others in issuance of Financial Assets or in distribution of Financial Assets of other issuers for fees or other benefits. UBS Limited and its affiliates may prefer various Financial Assets to which they have or may have Affiliation (as such term is defined under the Israeli Advisory Law). Nothing in this Material should be considered as investment advice under the Israeli Advisory Law. This Material is being issued only to and/or is directed only at persons who are Eligible Clients within the meaning of the Israeli Advisory Law, and this material must not be relied on or acted upon by any other persons. **Saudi Arabia:** This document has been issued by UBS AG (and/or any of its subsidiaries, branches or affiliates), a public company limited by shares, incorporated in Switzerland with its registered offices at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH-8001 Zurich. This publication has been approved by UBS Saudi Arabia (a subsidiary of UBS AG), a Saudi closed joint stock company incorporated in the Kingdom of Saudi Arabia under commercial register number 1010257812 having its registered office at Tatweer Towers, P.O. Box 75724, Riyadh 11588, Kingdom of Saudi Arabia. UBS Saudi Arabia is authorized and regulated by the Capital Market Authority to conduct securities business under license number 08113-37. **Dubai:** The information distributed by UBS AG Dubai Branch is intended for Professional Clients only and is not for further distribution within the United Arab Emirates. **United States:** Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries of UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a 'non-US affiliate') to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a document prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc. All transactions by a US person in the securities mentioned in this document must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. UBS Securities LLC is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule"), and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. **Canada:** Distributed by UBS Securities Canada Inc., a registered investment dealer in Canada and a Member-Canadian Investor Protection Fund, or by another affiliate of UBS AG that is registered to conduct business in Canada or is otherwise exempt from registration. **Brazil:** Except as otherwise specified herein, this material is prepared by UBS Brasil CCTVM S.A. to persons who are eligible investors residing in Brazil, which are considered to be: (i) financial institutions, (ii) insurance firms and investment capital companies, (iii) supplementary pension entities, (iv) entities that hold financial investments higher than R\$300,000.00 and that confirm the status of qualified investors in written, (v) investment funds, (vi) securities portfolio managers and securities consultants duly authorized by Comissão de Valores Mobiliários (CVM), regarding their own investments, and (vii) social security systems created by the Federal Government, States, and Municipalities. **Hong Kong:** Distributed by UBS Securities Asia Limited and/or UBS AG, Hong Kong Branch. **Singapore:** Distributed by UBS Securities Pte. Ltd. [MCI (P) 018/09/2015 and Co. Reg. No.: 198500648C] or UBS AG, Singapore Branch. Please contact UBS Securities Pte. Ltd., an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110); or UBS AG, Singapore Branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or document. The recipients of this document represent and warrant that they are accredited and institutional investors as defined in the Securities and Futures Act (Cap. 289). **Japan:** Distributed by UBS Securities Japan Co., Ltd. to professional investors (except as otherwise permitted). Where this document has been prepared by UBS Securities Japan Co., Ltd., UBS Securities Japan Co., Ltd. is the author, publisher and distributor of the document. Distributed by UBS AG, Tokyo Branch to Professional Investors (except as otherwise permitted) in relation to foreign exchange and other banking businesses when relevant. **Australia:** Clients of UBS AG: Distributed by UBS AG (Holder of Australian Financial Services License No. 231087). Clients of UBS Securities Australia Ltd: Distributed by UBS Securities Australia Ltd (Holder of Australian Financial Services License No. 231098). Clients of UBS Wealth Management Australia Ltd: Distributed by UBS Wealth Management Australia Ltd (Holder of Australian Financial Services License No. 231127). This Document contains general information and/or general advice only and does not constitute personal financial product advice. As such, the Information in this document has been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting on the Information, consider the appropriateness of the Information, having regard to their objectives, financial situation and needs. If the Information contained in this document relates to the acquisition, or potential acquisition of a particular financial product by a 'Retail' client as defined by section 761G of the Corporations Act 2001 where a Product Disclosure Statement would be required, the retail client should obtain and consider the Product Disclosure Statement relating to the product before making any decision about whether to acquire the product. The UBS Securities Australia Limited Financial Services Guide is available at: www.ubs.com/ecs-research-fsg. **New Zealand:** Distributed by UBS New Zealand Ltd. The information and recommendations in this publication are provided for general information purposes only. To the extent that any such information or recommendations constitute financial advice, they do not take into account any person's particular financial situation or goals. We recommend that recipients seek advice specific to their circumstances from their financial advisor. **Korea:** Distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch. This document may have been edited or contributed to from time to time by affiliates of UBS Securities Pte. Ltd., Seoul Branch. **Malaysia:** This material is authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (Capital Markets Services License No.: CMSL/A0063/2007). This material is intended for professional/institutional clients only and not for distribution to any retail clients. **India:** Prepared by UBS Securities India Private Ltd. (Corporate Identity Number U67120MH1996PTC097299) 2/F, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000. It provides brokerage services bearing SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, NSE (Currency Derivatives Segment) INE230951431, BSE (Capital Market Segment) INB010951437; merchant banking services bearing SEBI Registration Number: INM000010809 and Research Analyst services bearing SEBI Registration Number: INH000001204. UBS AG, its affiliates or subsidiaries may have debt holdings or positions in the subject Indian company/companies. Within the past 12 months, UBS AG, its affiliates or subsidiaries may have received compensation for non-investment banking securities-related services and/or non-securities services from the subject Indian company/companies. The subject company/companies may have been a client/clients of UBS AG, its affiliates or subsidiaries during the 12 months preceding the date of distribution of the research report with respect to investment banking and/or non-investment banking securities-related services and/or non-securities services. With regard to information on associates, please refer to the Annual Report at: http://www.ubs.com/global/en/about_ubs/investor_relations/annualreporting.html

The disclosures contained in research documents produced by UBS Limited shall be governed by and construed in accordance with English law.

UBS specifically prohibits the redistribution of this document in whole or in part without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements that are protected by third party copyright, trademarks and other intellectual property rights. © UBS 2016. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

