

Pinnacle West

Will 2024 drive the long-awaited generation capex?

Reiterate Rating: NEUTRAL | PO: 71.00 USD | Price: 71.84 USD

Rate case outcome key to 2024, future capex

Pinnacle West's (PNW) rate case is expected to be one of the first key regulatory data points of 2024, with a recommended opinion and order (ROO) likely in January followed by consideration at an open meeting of the ACC in February. Data points thus far have trended positively with a 9.68% staff rec ROE, up from 8.9%, and revenue requirement increase north of \$200m. Historically the ACC has exercised a broad degree of independence and while the ROO is a critical input, the open meeting discussion and any amendments may yet prove material. Support for generation capital spend via the SRB mechanism will also drive expectations for 2026+ with staff pivoting in favor in briefs filed in December.

O&M and interest rates still elevated, pension abating

Regulatory lag has historically been a feature of APS's earnings and we expect this to continue even beyond the current case with an assumed forward level of regulatory lag of 100 bps. Even with potential adoption of the SRB, we do not embed an assumption that the level of lag will improve given the move in interest rates and inflation impacts on operating and maintenance (O&M) beyond the end of the current test year which runs through Jun 2022. On the positive side of the ledger, y/y pension expense is now estimated at -3c, an improvement given the rally in financial assets in Q4. Still we see O&M, interest, and at best new rates in effect in Mar as limiting the step change higher in 2024.

Equity still expected in 2024, likely more in 2025-26

Our forecast for equity is \$500m in 2024, consistent with the upper end of mgmt's guidance. We also maintain an assumption of \$375m in each of 2025 and 2026 as PNW will need to inject equity into APS in order to keep the equity layer above 50%. Expect updated guidance to come post rate case outcome as well. An inflection higher in generation capex will likely drive funding needs higher as well (with acceleration of capex clearly possible too with a favorable SRB outcome), though on balance SRB-supported investment capital would be a net positive.

Positives priced in, PO at \$71, reiterate Neutral

We apply the latest peer multiple of 13.8x to our updated estimates and reiterate Neutral given the modest upside implied by our updated PO of \$71. PNW shares were a relative outperformer in 2023, though we see this as difficult to repeat in 2024 barring a substantial improvement in the regulatory regime and resulting capex opportunities.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	5.47	4.26	4.28	4.77	4.97
EPS Change (YoY)	12.3%	-22.1%	0.5%	11.4%	4.2%
Consensus EPS (Bloomberg)			4.25	4.90	5.12
DPS	3.36	3.42	3.48	3.54	3.62
Valuation (Dec)					
P/E	13.1x	16.9x	16.8x	15.1x	14.5x
Dividend Yield	4.7%	4.8%	4.8%	4.9%	5.0%
EV / EBITDA*	16.4x	16.0x	14.3x	13.0x	12.0x
Free Cash Flow Yield*	-7.5%	-5.7%	-4.7%	-4.6%	-4.1%

* For full definitions of *IQmethod*SM measures, see page 10.

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Timestamp: 03 January 2024 03:50AM EST

03 January 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	73.00	71.00
2024E Rev (m)	4,786.4	4,775.6
2025E Rev (m)	4,976.2	4,970.9
2023E EPS	4.26	4.28
2024E EPS	4.85	4.77
2025E EPS	5.06	4.97

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Stock Data

Price	71.84 USD
Price Objective	71.00 USD
Date Established	3-Jan-2024
Investment Opinion	B-2-7
52-Week Range	68.55 USD - 86.03 USD
Mrkt Val (mn) / Shares Out (mn)	8,140 USD / 113.3
Free Float	99.7%
Average Daily Value (mn)	72.09 USD
BofA Ticker / Exchange	PNW / NYS
Bloomberg / Reuters	PNW US / PNW.N
ROE (2023E)	8.0%
Net Dbt to Eqty (Dec-2022A)	125.6%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to ["BofA ESGMeter Methodology"](#).

Glossary

ACC: Arizona Corporation Commission

APS: Arizona Public Service

LFCR: Lost Fixed Cost Rider

ROO: Recommended Opinion and Order

SRB: System Reliability Benefit

iQprofileSM Pinnacle West

iQmethodSM – Bus Performance*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	3.5%	3.1%	3.5%	3.8%	4.1%
Return on Equity	10.7%	8.1%	8.0%	8.9%	8.9%
Operating Margin	21.2%	16.9%	19.0%	20.8%	22.3%
Free Cash Flow	(613)	(466)	(381)	(378)	(331)

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	1.4x	2.6x	2.6x	2.5x	2.4x
Asset Replacement Ratio	2.0x	2.1x	2.1x	2.1x	2.1x
Tax Rate	14.8%	13.0%	14.4%	14.4%	14.4%
Net Debt-to-Equity Ratio	114.7%	125.6%	135.7%	127.8%	124.3%
Interest Cover	3.5x	2.9x	2.9x	3.1x	2.9x

Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	3,804	4,324	4,556	4,776	4,971
% Change	6.0%	13.7%	5.3%	4.8%	4.1%
Gross Profit	1,697	1,708	1,896	2,078	2,251
% Change	3.8%	0.6%	11.0%	9.6%	8.3%
EBITDA	1,456	1,485	1,662	1,833	1,993
% Change	3.8%	2.0%	11.9%	10.3%	8.7%
Net Interest & Other Income	(59)	(156)	(277)	(299)	(354)
Net Income (Adjusted)	619	483	487	577	628
% Change	12.6%	-22.0%	0.8%	18.4%	8.8%

Free Cash Flow Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	619	484	485	577	628
Depreciation & Amortization	719	818	798	840	886
Change in Working Capital	0	0	1	1	1
Deferred Taxation Charge	113	37	(7)	(7)	(7)
Other Adjustments, Net	(591)	(97)	11	11	11
Capital Expenditure	(1,473)	(1,707)	(1,670)	(1,800)	(1,850)
Free Cash Flow	-613	-466	-381	-378	-331
% Change	-70.3%	24.0%	18.2%	0.9%	12.4%
Share / Issue Repurchase	(2)	(3)	25	500	375
Cost of Dividends Paid	(369)	(379)	(395)	(429)	(457)
Change in Debt	889	774	801	357	463

Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	10	5	33	62	91
Trade Receivables	392	453	0	0	0
Other Current Assets	1,149	1,293	1,745	1,745	1,744
Property, Plant & Equipment	15,987	16,854	17,732	18,698	19,668
Other Non-Current Assets	4,465	4,118	4,118	4,118	4,118
Total Assets	22,003	22,723	23,629	24,623	25,622
Short-Term Debt	0	0	21	22	50
Other Current Liabilities	1,757	1,762	1,763	1,763	1,764
Long-Term Debt	6,914	7,741	8,521	8,877	9,312
Other Non-Current Liabilities	7,311	7,060	7,053	7,046	7,040
Total Liabilities	15,982	16,564	17,358	17,709	18,165
Total Equity	6,021	6,160	6,271	6,915	7,457
Total Equity & Liabilities	22,003	22,723	23,629	24,623	25,622

* For full definitions of iQmethodSM measures, see page 10.

Company Sector

Electric Utilities

Company Description

Pinnacle West, through its regulated utility, Arizona Public Service (APS), provides electricity to more than one million customers in 11 counties in Arizona, including the Phoenix metropolitan area. APS provides power to over 1Mn customers and is a vertically integrated utility with ownership of transmission, distribution, and generation assets.

Investment Rationale

We rate PNW Neutral. Arizona remains a discount jurisdiction given a below-average regulatory scheme, but treatment of utilities has improved of late and we have confidence that PNW will be able to achieve its long-term 5-7% EPS target CAGR. With a historical test year rate making scheme, we see PNW as likely to under-earn its authorized ROE for much of the forecast period, with additional equity prior to the next case filing.

Stock Data

Average Daily Volume 983,701

Quarterly Earnings Estimates

	2022	2023
Q1	0.15A	-0.03A
Q2	1.45A	0.94A
Q3	2.88A	3.50A
Q4	-0.21A	-0.13E

Relative laggard after a strong start

PNW shares were a strong 2023 performer, notching 400-500 bps of outperformance vs. Utility indices through Dec 31. Relative performance based on forward 2-year PE has declined of late as investors reassess the outcome of the current pending rate case with implications for EPS growth in 2024+ as generation capital remains one of the biggest unknowns. Further worth considering is to what degree APS needs to file a subsequent case given ongoing structural lag, particularly as authorized O&M and cost of debt are likely to not reflect the latest higher moves in rates / inflation given the end of the current historical test year in Jun 2022.

Exhibit 1: Relative valuation

PNW shares trading off recently vs. peer group



Source: Bloomberg

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Regulatory support key to gen rider

The ACC staff's reply brief noted that APS "made additional important refinements to its proposed SRB "relative to that for Tucson Electric Power (TEP) and sees opportunities for additional enhancement. Overall the Staff now supports the SRB "as a transitional mechanism to clean energy" and recommends that the ACC be involved earlier in the planning process, similar to the water System Improvement Benefit (SIB) mechanism. Staff states that prudence of any SRB investment should be made in future rate cases. The Staff continues to oppose APS's request to increase its pension expense by ~\$21Mn. Staff recommends 9.68% ROE vs 8.2% or 8.7% from RUCO and 10.25% recommended by the company. Staff support is a positive development and not overly surprising following our stakeholder conversations. We still see continued regulatory lag and regulatory uncertainty which justifies a discounted valuation vs peers.

Under-earning likely to persist beyond rate case

We refresh our mini model estimates below.

- **Corporate drag mainly reflects 2025 refi.** At the holdco level we reflect the Jun 2025 refinancing of a \$500m bond with a 1.3% coupon, with an after-tax EPS impact of 16c assuming refinancing at 6.25%. The impact is spread roughly evenly across 2025 and 2026 given the midyear maturity.
- **Pension impact abating by year-end, but still see under-earn in 2024.** Based on financial asset performance through late Dec we forecast a ~3c pension impact in 2024 y/y. Note that we still expect 125 bps of lag in 2024 given a partial year contribution from new rates, improving to 100 bps in 2025 and beyond.



We note inputs into the pension expense in particular can be volatile. In addition we do not reflect a reversal of the 2023 or modeled 2024 headwind, which can potentially become a tailwind if asset prices and rates reverse their recent moves.

Exhibit 2: PNW mini model

Expect that under-earning continues post rate case resolution

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC	8,600	9,100	9,800	9,900	10,630	11,800	12,715	13,478	14,205	14,897
FERC	1,700	1,800	1,900	2,000	2,250	2,500	2,700	2,862	3,016	3,163
Total	10,300	10,900	11,700	11,900	12,880	14,300	15,415	16,340	17,221	18,061
Equity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC	54.70%	54.70%	54.70%	54.70%	48.61%	51.73%	50.97%	50.50%	49.43%	48.64%
FERC	51.30%	51.30%	51.30%	51.30%	51.30%	51.30%	51.30%	51.30%	51.30%	51.30%
ROE - Authorized	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC	10.00%	10.00%	10.00%	8.70%	8.70%	9.68%	9.68%	9.68%	9.68%	9.68%
FERC	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%
Over/under earning	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC					-0.85%	-1.25%	-1.00%	-1.00%	-1.00%	-1.00%
FERC	10.75%	10.75%	10.75%	10.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Earnings	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC					392	489	542	574	594	614
FERC					117	131	143	153	162	170
Total	565	568	632	525	509	620	686	727	756	785
Shares out	113	113	113	113	114	121	126	131	132	132
EPS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ACC					3.44	4.04	4.29	4.38	4.51	4.67
FERC					1.03	1.08	1.14	1.17	1.23	1.29
Parent less NCI					(0.36)	(0.36)	(0.46)	(\$0.55)	(\$0.57)	(\$0.60)
Total	5.01	5.03	5.59	4.63	4.12	4.77	4.97	5.00	5.17	5.36

Source: BofA Global Research estimates, company report

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Transmission: key lever for additional investment?

Growth of rate base and earnings of PNW's FERC-regulated transmission investment is a notable bright spot for the company. The current capital and rate base guidance calls for annualized growth of ~10% in rate base from \$2B in 2022 to \$2.7B in 2025 – a key driver of growth with ROE set at 10.75%, well above ACC-approved levels and better than most regulated utility peers. With growing need to bolster the grid and ongoing concerns about the ability for APS to deploy incremental generation capital in the near term, look for mgmt. to potentially rely on this lever to an increasing degree with forthcoming updates.

2024 drivers: Rate case outcome key unknown

Given the still-pending APS rate case, timing for formal 2024 EPS guidance may still align with the company's Q4 update in February. If a ROO is posted in early Jan, timing could align with an open meeting agenda in Feb. Our preliminary read of drivers is highly dependent on the rate case outcome – we embed a base increase of ~\$225m which is below staff's position of \$283m and slightly more than half of \$376m requested by APS. We also assume O&M inflation which is largely driven by the company's forecast of a scheduled outage at Four Corners (approx. \$30m alone).

Unlike previous years we also add share count dilution driven by our forecast of an issuance of \$500m in 2024 which aligns with the existing guidance and will likely be achieved via block issuance. We stress balance sheet remains a growing variable as we see a split rating backdrop with the agencies (Moody's remains at A3 with a negative outlook). With APS below its 50% equity threshold today, we anticipate a need to demonstrate action to bolster its balance sheet alongside a potentially constructive affirmation of the Arizona construct in this rate case (which could help Moody's in particular reduce its minimum downgrade threshold of 18%). On balance we see the '24 story as evolving towards one focused on balance sheet and capex upon resolution of this rate case in the near-term.

Our forecast also assumes normal weather which will result in a -45c headwind given the very strong positive contribution from record high temperatures during the summer months. Load growth is admittedly a wildcard given uncertain contribution from residential and industrials – at 15c there could be upside to our estimate if residential growth is robust. Pension expense has moderated based on our mark to market and we now see -3c in 2024, a reduction from ~20c we had flagged earlier in the year which was before the Q4 run-up in financial and debt asset prices.

Based on these inputs we see 2024 EPS coming in at \$4.77, a ~9% CAGR from the original 2022 midpoint of \$4.00 which remains the base for mgmt.'s long-term target growth of 5-7%. Our forecast is 3% below Street at \$4.90.

Exhibit 3: PNW EPS walk

\$4.77 seen as 2024 EPS, highly dependent on rate case outcome

	EPS	1Q23	2Q23	3Q23	4Q23
FY22A Adjusted EPS	4.26	-0.03	0.94	3.50	-0.13
Weather (normalize)	-0.45	-0.10	0.12	-0.47	0.00
Normalized EPS	3.81	-0.13	1.06	3.03	-0.13
Base rate increase	1.59	0.25	0.39	0.65	0.30
Load growth	0.15	0.04	0.04	0.04	0.04
Transmission	0.20	0.05	0.05	0.05	0.05
LFCR - May	0.07	0.02	0.02	0.02	0.01
Other	0.00	0.00	0.00	0.00	0.00
Operating revenue	2.01	0.36	0.50	0.76	0.40
O&M	-0.28	-0.05	-0.05	-0.05	-0.13
D&A	-0.24	-0.04	-0.06	-0.07	-0.07
Other taxes	0.00	0.00	0.00	0.00	0.00
Pension & OPEB	-0.03	0.00	-0.01	-0.01	-0.01
Interest expense	-0.25	-0.07	-0.07	-0.07	-0.06
Corp & elimination, other	0.00	0.00	0.00	0.00	0.00
Share count dilution	-0.25	0.00	-0.08	-0.08	-0.08
FY24E Adjusted EPS	4.77	0.07	1.28	3.51	-0.08
FY24 Consensus	4.90	0.09	1.31	3.39	0.08
BofA Beat(Miss) vs Consensus	-3%	nm	-2%	1%	nm
FY24 Adj EPS Guidance (PNW)	\$4.70-4.90				

Source: BofA Global Research, Bloomberg

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Credit steady but future moves uncertain

PNW has committed to not issuing equity until the conclusion of its existing rate case, and in the meantime its credit metrics remain pressured. Pinnacle West Corp's Baa1/BBB+/BBB+ is on negative outlook at all three rating agencies, with the regulatory backdrop frequently cited as the cause in updated credit analysis pieces. It is important to recognize that the credit rating is higher than that for many value utility peers.

Moody's currently applies an 18% threshold to PNW's parent, which is above our consolidated forecast and also represents the upper end of the 16-18% range that mgmt. has targeted. Importantly, PNW management has not committed to defending its current ratings – this is likely a key consideration of regulatory and stakeholder discussions given the impact of ACC decisions on PNW's overall cost of capital as regulators seek ways to reduce lag across the jurisdiction.

Exhibit 4: PNW credit

Still see metrics trending above target with our equity issuance plan

Credit Ratings	2020A	2021A	2022A	2023A	2024A	2025A	2026A	2027A	2028A
CFO pre WC	1,181	1,214	1,238	1,289	1,422	1,519	1,593	1,666	1,730
FFO - Moody's Adj	1,301	1,334	1,358	1,409	1,542	1,639	1,713	1,786	1,850
Delta	120	120	120	120	120	120	120	120	120
Disclosed Total Debt	6,314	6,914	7,741	8,543	8,899	9,362	9,779	10,499	11,135
Disclosed Total Cash	<u>60</u>	<u>10</u>	<u>5</u>	<u>33</u>	<u>62</u>	<u>91</u>	<u>120</u>	<u>148</u>	<u>147</u>
Net Debt	6,254	6,904	7,736	8,509	8,837	9,271	9,660	10,351	10,988
Debt - Moodys Adj	6,791	7,441	8,273	9,046	9,374	9,808	10,197	10,888	11,525
Delta	537	537	537	537	537	537	537	537	537
CFO ex-WC/Debt - Moody's Adjusted	19.2%	17.9%	16.4%	15.6%	16.4%	16.7%	16.8%	16.4%	16.1%

Source: BofA Global Research estimates, company report

Estimates

We update our forecast to reflect the EPS estimates detailed above. We continue to see a nonlinear growth story with a step change higher in 2024 followed by a moderation of growth given ongoing lag. Upside could materialize in out years of the forecast if the SRB is approved resulting in additional generation capital.

Given recent impacts of inflation and higher interest rates, another rate case filing is likely in the medium term as APS looks to catch up as its current rate case test year only runs through mid-2022. Expect clarity from the Arizona regulatory lag docket as well in coming months which could guide forward-looking rate setting policy.

Exhibit 5: PNW EPS forecast

We see growth in 5-7% range with a step change higher post 2024 rate case; we remain below Street on '25.

	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E
Arizona Public Service	\$5.20	\$5.74	\$4.78	\$4.62	\$5.13	\$5.43	\$5.53	\$5.77	\$5.96
Corporate	(\$0.15)	(\$0.12)	(\$0.37)	(\$0.20)	(\$0.22)	(\$0.32)	(\$0.42)	(\$0.44)	(\$0.47)
Non-controlling interest	(\$0.17)	(\$0.15)	(\$0.15)	(\$0.15)	(\$0.14)	(\$0.14)	(\$0.13)	(\$0.13)	(\$0.13)
PNW EPS	\$4.87	\$5.47	\$4.26	\$4.26	\$4.77	\$4.97	\$5.00	\$5.17	\$5.36
Previous BofA estimate	\$4.87	\$5.47	\$4.87	\$4.26	\$4.85	\$5.06			
EPS y/y % CAGR	2.1%	12.2%	-22.0%	0.0%	11.9%	4.2%	0.7%	3.3%	3.7%
EPS % CAGR from 2022 midpoint (\$4.00, guide 5-7%)				6.6%	9.2%	7.5%	5.8%	5.3%	5.0%
EPS Guidance				4.10-4.30					
Consensus PNW EPS	\$5.06	\$5.06	\$5.06	\$4.25	\$4.90	\$5.12	\$5.33	\$5.48	\$5.75
EPS y/y % CAGR	6.1%	0.0%	0.0%	-16.0%	15.1%	4.7%	4.1%	2.8%	4.9%
EPS % CAGR from 2022 (guide 5-7%)				6.3%	10.6%	8.6%	7.5%	6.5%	6.2%

Source: BofA Global Research, Bloomberg

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Valuation

We roll forward our valuation and apply the latest peer group multiples of 13.8x for electric utilities. We maintain our relative premium/discount of +3x for transmission and -1x for ACC given respective growth characteristics and authorized returns. Our PO is updated to \$71 and we reiterate Neutral given the modest positive total return implied.

Exhibit 6: PNW valuation

PO moves to \$71, reiterate Neutral

Price Objective \$70	
PNW Valuation: P/E Based on 2026 EPS	
Price Objective	
Group Peer Multiple - Electric	13.8x
Group EPS CAGR - Electric	5.00%
P/E Multiple - Utility Average	14.5x
ACC Relative Discount	-1.0x
FERC Relative Premium	3.0x
ACC 2026 Earnings (\$m)	575
EPS (\$/sh)	4.37
Multiple applied	13.5x
\$/sh Equity value	\$58.9
FERC 2026 Earnings (\$m)	153
EPS (\$/sh)	1.17
Multiple applied	17.5x
\$/sh Equity value	\$20.4
Parent drag (\$/sh)	(\$0.42)
Non-controlling interest (\$/sh)	(\$0.13)
Multiple applied	14.5x
\$/sh Equity value	(\$8.0)
Price objective	\$71
Shares outstanding (2026 BofAe)	131.6
2024 Dividend	\$3.5
Dividend Yield	4.9%
Total Return (%)	2.7%

Source: BofA Global Research, Bloomberg

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Price objective basis & risk

Pinnacle West (PNW)

Our price objective of \$71 is based on a peer utility P/E multiple of 13.8x, grossed up for a year by 5% to reflect capital appreciation across the sector.

For Arizona Corporation Commission (ACC) regulated assets we apply a -1x discount to reflect the relative quality of the jurisdiction and ongoing earned ROE lag.

For Federal Energy Regulatory Commission (FERC) regulated assets we apply a +3x premium to reflect a premium ROE and rider recovery of invested capital.

Upside and downside risks to the Price Objective are changes in 1) regulatory, political, and legislative relationships/outcomes, 2) load growth in territory versus expectations, 3) riders and capital trackers implementation 4) weather, nuclear, and natural disasters, 5) interest rates, 6) pension liabilities and asset returns, 7) equity needs relative to forecasts, 8) capital expenditures, and 9) ability to control costs to earn a return on equity.

Analyst Certification

I, Julien Dumoulin-Smith, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alliant Energy Corporation	LNT	LNT US	Julien Dumoulin-Smith
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Array Technologies	ARRY	ARRY US	Julien Dumoulin-Smith
	Atlantica Sustainable Infrastructure	AY	AY US	Julien Dumoulin-Smith
	Atmos Energy Corporation	ATO	ATO US	Julien Dumoulin-Smith
	CenterPoint Energy	CNP	CNP US	Julien Dumoulin-Smith
	Cheniere Energy Inc	LNG	LNG US	Julien Dumoulin-Smith
	Clearway Energy	CWENA	CWEN/A US	Julien Dumoulin-Smith
	Clearway Energy	CWEN	CWEN US	Julien Dumoulin-Smith
	CMS Energy	CMS	CMS US	Julien Dumoulin-Smith
	Consolidated Edison	ED	ED US	Julien Dumoulin-Smith
	DTE Energy	DTE	DTE US	Julien Dumoulin-Smith
	Duke Energy	DUK	DUK US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	ENLT	ENLT US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	XENLF	ENLT IT	Julien Dumoulin-Smith
	Entergy	ETR	ETR US	Paul Zimbardo
	First Solar, Inc.	FSLR	FSLR US	Julien Dumoulin-Smith
	Fluence Energy	FLNC	FLNC US	Julien Dumoulin-Smith
	Hannon Armstrong	HASI	HASI US	Julien Dumoulin-Smith
	Hydro One	YH	H CN	Dariusz Lozny, CFA
	MDU Resources Group, Inc.	MDU	MDU US	Dariusz Lozny, CFA
	Nextracker Inc	NXT	NXT US	Julien Dumoulin-Smith
	NiSource Inc	NI	NI US	Julien Dumoulin-Smith
	NorthWestern Corporation	NWE	NWE US	Julien Dumoulin-Smith
	NRG Energy	NRG	NRG US	Julien Dumoulin-Smith
	PG&E Corporation	PCG	PCG US	Julien Dumoulin-Smith
	PNM Resources Inc.	PNM	PNM US	Julien Dumoulin-Smith
	Portland General Electric Company	POR	POR US	Julien Dumoulin-Smith
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	Sempra Energy	SRE	SRE US	Julien Dumoulin-Smith
	Sunnova Energy	NOVA	NOVA US	Julien Dumoulin-Smith

North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	SunRun	RUN	RUN US	Julien Dumoulin-Smith
	TPI Composites	TPIC	TPIC US	Julien Dumoulin-Smith
	Vistra Energy	VST	VST US	Julien Dumoulin-Smith
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
NEUTRAL				
	AES	AES	AES US	Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Dariusz Lozny, CFA
	Algonquin Power & Utilities Corp	YAQN	AQN CN	Dariusz Lozny, CFA
	AltaGas	YALA	ALA CN	Dariusz Lozny, CFA
	Ameresco	AMRC	AMRC US	Julien Dumoulin-Smith
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Cameron Lochridge
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Emera Inc	YEMA	EMA CN	Dariusz Lozny, CFA
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith
	Exelon	EXC	EXC US	Paul Zimbardo
	Generac Holdings Inc.	GNRC	GNRC US	Julien Dumoulin-Smith
	Idacorp	IDA	IDA US	Paul Zimbardo
	Maxon Solar Technologies	MAXN	MAXN US	Julien Dumoulin-Smith
	New Fortress Energy	NFE	NFE US	Cameron Lochridge
	NextEra Energy	NEE	NEE US	Julien Dumoulin-Smith
	NextEra Energy Partners	NEP	NEP US	Julien Dumoulin-Smith
	OGE Energy Corp	OGE	OGE US	Julien Dumoulin-Smith
	Ormat Technologies	ORA	ORA US	Julien Dumoulin-Smith
	Pinnacle West	PNW	PNW US	Julien Dumoulin-Smith
	Southern Company	SO	SO US	Julien Dumoulin-Smith
	Southwest Gas Holdings	SWX	SWX US	Julien Dumoulin-Smith
	TransAlta Corp	TAC	TAC US	Dariusz Lozny, CFA
	TransAlta Corporation	YTA	TA CN	Dariusz Lozny, CFA
	WEC Energy Group Inc	WEC	WEC US	Julien Dumoulin-Smith
UNDERPERFORM				
	Allete Inc	ALE	ALE US	Julien Dumoulin-Smith
	American Water Works	AWK	AWK US	Julien Dumoulin-Smith
	Avangrid	AGR	AGR US	Paul Zimbardo
	Avista	AVA	AVA US	Julien Dumoulin-Smith
	Black Hills Corporation	BKH	BKH US	Julien Dumoulin-Smith
	Dominion Energy	D	D US	Paul Zimbardo
	Edison International	EIX	EIX US	Paul Zimbardo
	Enphase Energy	ENPH	ENPH US	Julien Dumoulin-Smith
	Eversource Energy	ES	ES US	Paul Zimbardo
	FirstEnergy	FE	FE US	Julien Dumoulin-Smith
	Fortis	YFTS	FTS CN	Dariusz Lozny, CFA
	Fortis Inc	FTS	FTS US	Dariusz Lozny, CFA
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCI US	Julien Dumoulin-Smith
	Hawaiian Electric Industries	HE	HE US	Julien Dumoulin-Smith
	MGE Energy	MGEE	MGEE US	Julien Dumoulin-Smith
	New Jersey Resources Corp	NJR	NJR US	Julien Dumoulin-Smith
	ONE Gas, Inc.	OGS	OGS US	Julien Dumoulin-Smith
	SolarEdge Technologies	SEDG	SEDG US	Julien Dumoulin-Smith
	Spire	SR	SR US	Julien Dumoulin-Smith
	Stem, Inc.	STEM	STEM US	Julien Dumoulin-Smith
	SunPower Corp.	SPWR	SPWR US	Julien Dumoulin-Smith
	UGI Corp.	UGI	UGI US	Julien Dumoulin-Smith

IQmethodSM Measures Definitions

Business Performance

Return On Capital Employed

Return On Equity
Operating Margin
Earnings Growth
Free Cash Flow

Quality of Earnings

Cash Realization Ratio
Asset Replacement Ratio
Tax Rate
Net Debt-To-Equity Ratio
Interest Cover

Valuation Toolkit

Price / Earnings Ratio
Price / Book Value
Dividend Yield
Free Cash Flow Yield
Enterprise Value / Sales

EV / EBITDA

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income
Operating Profit
Expected 5 Year CAGR From Latest Actual
Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations
Capex
Tax Charge
Net Debt = Total Debt – Cash & Equivalents
EBIT

Numerator

Current Share Price
Current Share Price
Annualised Declared Cash Dividend
Cash Flow From Operations – Total Capex
EV = Current Share Price × Current Shares + Minority Equity + Net Debt +
Other LT Liabilities
Enterprise Value

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill
Amortization
Shareholders' Equity
Sales
N/A
N/A

Denominator

Net Income
Depreciation
Pre-Tax Income
Total Equity
Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified)
Shareholders' Equity / Current Basic Shares
Current Share Price
Market Cap = Current Share Price × Current Basic Shares
Sales

Basic EBIT + Depreciation + Amortization

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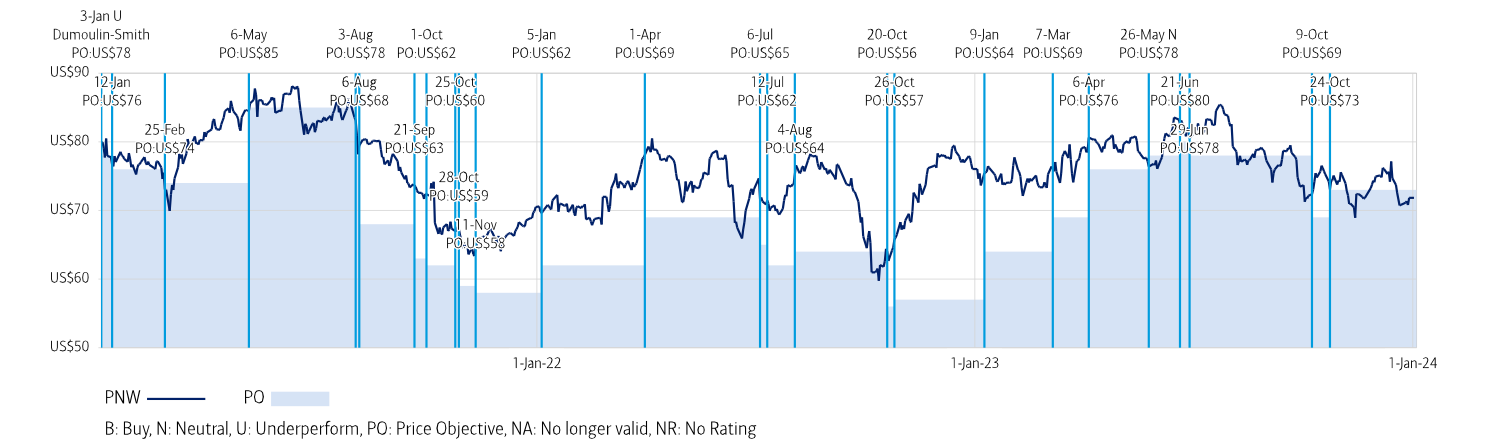
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Pinnacle West Cap (PNW) Price Chart



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Equity Investment Rating Distribution: Utilities Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	72	46.45%	Buy	52	72.22%
Hold	45	29.03%	Hold	32	71.11%
Sell	38	24.52%	Sell	21	55.26%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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