

US Utilities & IPPs

Pension Pain 2023 Edition: Rising interest rates inflect more damage on the sector

Industry Overview

Pension Pain 2023 edition: less income/more expense

We revisit pension accounting for regulated utilities given the unfavorable market conditions: higher interest rates, labor compensation inflation, and declines in asset markets (debt & equity primarily). Lower interest income was an overhang for select utilities and a material earnings headwind YoY in 2023. *Most investors have paid less attention to pension accounting in 2023* with the equity markets still robust (S&P 500 +10% YTD, down from +20% at the peak); however, this is just one variable in the mix.

Average utility pension fund is likely lagging target

The average large cap US utility has an expected return on assets of 6.5-7.0% with the more conservative teams targeting 5.0-5.5% versus the more optimistic embedding a 7.3-8.3% assumption. The highest assumed return on asset we are aware of is for Eversource Energy (ES), embedding an 8.25% long-term return. While US equities are +10% YTD, other major asset classes are lagging, notably US Government debt -12%. The average utility pension plan is weighted toward fixed income/debt at ~40%, 30-35% equities, 25% a mix of private equity, real estate, & other, with the balance in cash. While a rise in interest rates is helpful in lowering the net present value of the pension liability, higher interest rates generally lead to more pension expense/less income. This is because the service & interest costs accrue at a higher rate. Between a lower-than-expected plan balance (asset performance below expected) and higher carrying costs on albeit lower liabilities, we expect higher pension expense/lower pension income for companies in 2024 based on market performance through October 23rd.

FirstEnergy: Pension income under renewed focus

FirstEnergy (FE) has the most exposure to pension volatility with accounting policies with more real-time recognition and the decision to voluntarily contribute \$750Mn to its underfunded pension plan in 2Q23. FE triggered a positive remeasurement mark-to-market benefitting FY23 income with +\$0.08 pension income per management. With the sharp increase in interest rates and weakness in debt/equity markets, we see pension mark-to-markets back in focus. While a challenging calculation, we estimate a -\$0.10 loss of pension income for FE on a MtM basis for FY24+, effectively reversing the positive MtM. This represents a -4% risk to \$2.71 FY24 implied guidance.

What companies to monitor? PNW, PEG, AWK, ES, & OGS

The other utility companies with accounting policies that have less smoothing are PSE&G (PEG), Pinnacle West Capital (PNW), American Water Works (AWK), Eversource Energy (ES), and OneGas (OGS). PEG and AWK have reduced their exposure with regulatory mechanisms effective within the last year. PEG additionally executed a sale of the pension at its unregulated subsidiary (i.e. 'lift out'). ES' exposure is dampened with some regulatory mechanisms as well. PNW has the highest debt investment mix at 75-80%; while theoretically a more conservative strategy, the adverse exposure to interest rates creates more negative exposure, before hedges. We maintain Underperform on shares of FE due to risk to consensus/guidance and we view the shares as expensive.

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Refer to important disclosures on page 7 to 10. Analyst Certification on page 5. Price
Objective Basis/Risk on page 4.

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Equity United States Utilities

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Glossary MtM: Mark to market ROA: Return on assets

Pension accounting background: A key sector issue ahead

We have written extensively on pension accounting; please refer to reports below. Even companies with more conservative accounting will face higher pension expense with two years of poor returns – this is another sector headwind that will trickle into earnings in 2024 for companies that smooth pension income/expense as well.

BofA Global Research Reports

Title: Subtitle	Primary Author	Date Published
US Utilities & IPPs: PowerPoints: FEpension, ED credit, PIM auction, Virginia Dominion, & Texas Power	Julien Dumoulin-Smith	24 March 2023
US Electric Utilities & IPPs: Pension Math 202: risks underappreciated: Who is most (and least) exposed 2023+?	Julien Dumoulin-Smith	26 May 2022
FirstEnergy: Downgrade to Neutral: Investors leam Pension 101 and it is not fun	Julien Dumoulin-Smith	16 May 2022

PNW: High exposure to debt markets a material headwind

PNW guided to a \$0.25-\$0.30 YoY decline in pension income, a notable drag in the \$3.95-\$4.15 2023 guidance range. PNW states that it hedges 100% of interest rate volatility in its pension using fixed income portfolio assets and Treasury future contracts. Based on inputs including disclosed sensitivities as well as the move in rate benchmarks since Dec 2022, we estimate an impact of between 20-25c downside in 2024. We reduced our estimates in 2024, we see potential for O&M flex and other levers as offsets.

While PNW is requesting some regulatory recovery of lost pension income in its pending rate case, there is a high degree of uncertainty related to pension income.

Pinnacle West: 2023 EPS preview: Guide range likely flat y/y as pension bites, if it's provided 09 January 2023

Exhibit 1: PNW Calculations of Pension Income Reduction for Following Year

We estimate a -\$0.22 negative pension impact for 2024, less than the YoY reduction for 2023 but cautious nonetheless

Pension Analysis		FY23 E
Pension Income		
YE22 Pension Assets		329
Expected Return (%)	6.70	190
YE23 Pension Assets - Expected	3,0)19
		(89)
YE22 Pension Assets - Actual	2,7	740
YE22 Pension Assets - Expected vs Actual		279
Expected Return FY23 (%)		6.7
Lower Pension Income (Pre-Tax)		19
Corridor Amortization Offset: Above 10%?		-
Lower Pension Income (Post-Tax)		15
EPS	0	.13
Pension Expense - Underfunding		
YE22 Pension Obligation	, -	310
Change in Discount Rate		278)
YE23 Pension Obligation	2,5	
Service & Interest Costs (Pre-Tax)		(5)
Service & Interest Costs (Post-Tax)		(4)
EPS .	(0	0.04)
Pension Expense - Costs		
Higher Service & Interest Costs (Pre-Tax)		19
Higher Service & Interest Costs (Post-Tax)		15
EPS -		.13
Total		25
BofA NEGATIVE		\$0.22
% 2024 Consensus EPS		4.6%
Source: Company Filings, Bloomberg, & BofA Global Research		
	_	

Despite this potential challenge for growth in 2024, we maintain Neutral on shares of PNW which are approximately fairly valued currently.



BofA GLOBAL RESEARCH

FE: Positive remeasurement in 2023 increases uncertainty

FirstEnergy realized pension income of:

• 2020: \$0.35

2021: \$0.45

2022: \$0.41

In 2023, FE originally guided to \$0.03 pension income, a -\$0.38 YoY decline which was mitigated by management deciding to increase its expected return on asset to 8.0% from 7.5% 2020-2022. The +\$0.03 pension income FY23 guidance was increased to \$0.11 due to the pension remeasurement and voluntary contribution.

<u>FirstEnergy: Finding Offsets for 1H23 Weather: Pension income, cost cuts, and lower tax</u> rate 02 August 2023

For FirstEnergy, the pension mark-to-market calculations could be more negative as FE recognized a remeasurement as of 4/30/23. The S&P 500 is only +1% since April 30^{th} , with the +7.7% return on assets through 4/30/23 effectively pulled-forward and capturing in the higher FY23 guidance. FE guides to 6-8% annual operating EPS guidance which implies +\$0.18 YoY at the midpoint in FY24 (\$2.72). The decline in pension income represents a -\$0.11 YoY drag which indicates that FE will have to grow the non-pension business +11% to achieve its guidance. With costs cuts and tax reductions pulled-forward into 2023 to offset weather, we believe this will be challenging.

We stress mgmt has expressed outsized confidence in our view on achieving both FY23 and FY24 execution. We anticipate a robust update on its ability to execute with 3Q/EEI updates ahead. Watch for breakdown on higher equity ratios vs cost measures & other factors.

FE's request for special treatment of pension income off to a difficult start

FE is pursuing Pension/OPEB Normalization (PON) mechanism in its rate cases, but the Maryland Public Service Commission (PSC) denied the request. The Administrative Law Judge (ALJ) recommendation stated that FirstEnergy did not justify its request for "special treatment."

Exhibit 2: FirstEnergy 2022 and 2023 Calculations of Pension Income Reduction for <u>Following Year</u> FE's pension income in sharp focus with utility investors narrowly looking at utility earnings quality

FY23 E FirstEnergy (FE) Analysis 2022 Guidance 1Q22A FY22 E **Pension Income** YF22 Pension Assets 9 020 9.020 9.020 6.693 **Expected Return** 180 677 657 535 YE23 Pension Assets - Expected 9 200 9,697 9,677 7,228 Actual Return 8.497 7.297 6.844 YE23 Pension Assets - Actual 8 4 9 7 YE23 Pension Assets - Expected vs Actual 704 1,200 2,380 385 8.00% 8.00% 800% 8.00% Expected Return FY23 190 Lower Pension Income (Pre-Tax) 44 149 24 Lower Pension Income (Post-Tax) **EPS** 0.08 0.13 0.26 0.04 Pension Expense - Underfunding YE22 Pension Obligation 11,479 11,479 11,479 8,828 Change in Discount Rate 10.361 YE23 Pension Obligation 10.361 8.093 7.890 Service & Interest Costs (Pre-Tax) (96)(27)Service & Interest Costs (Post-Tax) (29)(29 (75)(21)(0.04)(0.05)(0.05)(0.13)Pension Expense - Costs 66 Higher Service & Interest Costs (Pre-Tax) 57 220 44 51 Higher Service & Interest Costs (Post-Tax) 0.08 0.08 0.30 0.09 **EPS** 90 245 54 **Total Post Tax Expense** 60

57.1

Exhibit 2: FirstEnergy 2022 and 2023 Calculations of Pension Income Reduction for Following Year

FE's pension income in sharp focus with utility investors narrowly looking at utility earnings quality

 FirstEnergy (FE) Analysis
 2022 Guidance
 1Q22A
 FY22 E
 FY23 E

 BofA NEGATIVE EPS
 \$0.10
 \$0.16
 \$0.43
 \$0.09

 2022 Actual
 \$0.38
 \$0.38

Source: Company Filings, Bloomberg, & BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 3: Primary stocks mentioned in this report

Prices and ratings for primary stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
FE	FE US	FirstEnergy	US\$ 34.99	B-3-7
PNW	PNW US	Pinnacle West Capit	US\$ 73.07	B-2-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

FirstEnergy (FE)

The \$36 Price Objective is based on a sum-of-the-parts valuation. Our multiples are driven by relative P/E premiums/discounts to the 15.8x 2025E regulated peer multiple. Peer P/E multiple is grossed up for a year by 5% to reflect capital appreciation across the sector, a consistent approach across our coverage universe. We apply -2x discount to reflect rate review risk, below average risk, and pension exposure. We subtract out the holding company debt given the above-average leverage

Upside and downside risks to the Price Objective are: 1) regulatory/political/legislative outcomes, 2) ability to earn the allowed ROEs and/or other changes in regulatory earnings, 3) weather and natural disasters, 4) investigation revelations, 5) equity needs versus forecasts, 6) capital expenditures, 7) pension plan returns, discount rate changes, and interest/service costs associated with the plan, 8) economic conditions & interest rates, and 9) taxes.

Pinnacle West (PNW)

Our price objective of \$69 is based on a peer utility P/E multiple of 14.1x on our 2025E EPS of \$5.01 with a -1.0x discount to account for future rate case risk, uncertain recovery of clean generation spend, resource adequacy concerns in the state, and general below-average regulatory environment in Arizona, PNW's sole jurisdiction. Electric and gas peer P/E multiple is grossed up for a year by 5% to reflect capital appreciation across the sector.

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	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Alliant Energy Corporation	LNT	LNT US	Julien Dumoulin-Smith
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Ameresco	AMRC	AMRC 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
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	CenterPoint Energy	CNP	CNP US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Alex Vrabel
	Cheniere Energy Inc	LNG	LNG US	Julien Dumoulin-Smith
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	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
	9,			Paul Zimbardo
	Exelon	EXC	EXC US	
	First Solar, Inc.	FSLR	FSLR US	Julien Dumoulin-Smith
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCLUS	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
	ReNew Power	RNW	RNW US	Julien Dumoulin-Smith
	Sempra Energy	SRE	SRE US	Julien Dumoulin-Smith
	. 0,			•
	Sunnova Energy	NOVA	NOVA US	Julien Dumoulin-Smith
	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
EUTRAL				
	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
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Emera Inc	YEMA	EMA CN	Dariusz Lozny, CFA
	Entergy	ETR	ETRUS	Paul Zimbardo
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith
	Fluence Energy	FLNC	FLNC US	Julien Dumoulin-Smith
	ldacorp	IDA	IDA US	Paul Zimbardo
	Maxeon 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
	Northwest Natural Holdings	NWN	NWN US	Julien Dumoulin-Smith
	OGE Energy Corp	OGE	OGE US	Julien Dumoulin-Smith
	ONE Gas, Inc.	OGS	OGS US	Julien Dumoulin-Smith
	Ormat Technologies	ORA	ORA US	Julien Dumoulin-Smith



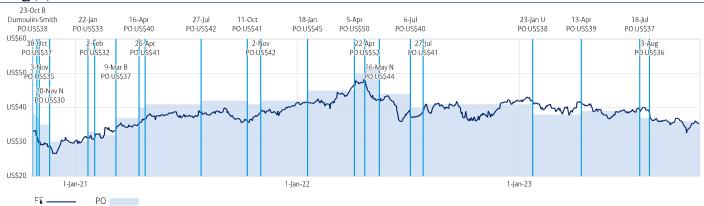
North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	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
	Generac Holdings Inc.	GNRC	GNRC 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
	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
	Tellurian Inc	TELL	TELL US	Julien Dumoulin-Smith
	UGI Corp.	UGI	UGIUS	Julien Dumoulin-Smith

Disclosures

Important Disclosures

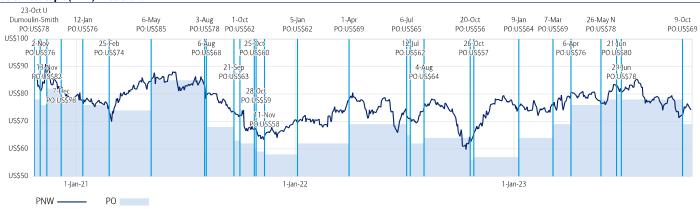
FirstEnergy (FE) Price Chart



 $B: Buy, N: Neutral, U: Underperform, PO: Price \ Objective, NA: \ No \ longer \ valid, NR: \ No \ Rating$

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Pinnacle West Capit (PNW) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Utilities Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	80	51.28%	Buy	51	63.75%
Hold	42	26.92%	Hold	32	76.19%
Sell	34	21.79%	Sell	22	64.71%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

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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}

виу	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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