

US Utilities & IPPs

PowerPoints: XEL Fire/EPS CAGR, FE Coal, Hydrogen Credits, TX/VST Power, & ES CT

Industry Overview

XEL: Marshall Fire a wildcard in positive 4Q23 update

Per local media reports, there have been 281 lawsuits filed against Xcel Energy (XEL) related to the December 30, 2021 Marshall Fire and none against the Twelve Tribes entity. The Twelve Tribes was identified in the Boulder County Sheriff report as having been involved in some fire activity on December 24, 2021. Target's litigation against Xcel also named CenturyLink and Teleport Communications, LLC, as defendants who had infrastructure on the same pole as Xcel. As of October 24, 2023, Xcel reported that it was aware of 14 complaints naming the company as a defendant on behalf of 675+ plaintiffs. A large increase in complaints was expected in November/December 2023 ahead of the YE23 deadline to file. We maintain Buy on XEL with a positive risk/reward outlook.

With the 4Q23 earnings update, we will critically be watching the Marshall Fire disclosure qualitatively and quantitatively, particularly if there is a refinement of the \$2Bn+ property loss estimate from the Colorado Insurance Commissioner. We would not expect Xcel to record a liability with 4Q23 earnings due to the inability to estimate a range of possible liability, consistent with 3Q23 earnings. We continue to expect Xcel to increase its long-term EPS growth rate to 6-8% from 5-7% previously due to the significant increase in capital investment for Colorado primarily, as well as other jurisdictions. The Marshall Fire uncertainty is a variable in management's assessment but we believe that the growth rate is increased. Pointing to the top-end or higher than the 5-7% growth rate could be a third option with a similar effect as a +100bp CAGR increase. [Please see our recent thoughts: Long-Term Reset Still In Place for 4Q.](#)

Hydrogen: Senate Democrats optimistic for tax changes

Per media reports, Democratic Senate leadership stated that they expect the draft Hydrogen 45V tax credits from the Inflation Reduction Act (IRA) to be modified to ease compliance. Senate Environment & Public Works Chair Tom Carper (D-DE) and Energy & Natural Resources Chair Joe Manchin (D-WV). Manchin stated that the restrictive draft guidelines threaten the viability of four or five of the proposed 'hydrogen hubs'. Comments are due February 26th with a public hearing on March 25th. We will specifically be looking to see if there is a relaxation of the (1) time matching standard from hourly in 2028+; (2) additionality, particularly for nuclear; and (3) the 5% carveout with a broad definition. See background on the hydrogen drafts here: [Hydrogen Hangover: What The US Treasury Regs Mean for Nuclear, Hydrogen, & More 07 December 2023](#)

FE: Coal prices continue to fall and an earnings headwind

API2 Europe forward coal prices continue to decline, falling to ~\$100/ton. Prices are still meaningfully above the \$60-65/ton in 2020 but are down substantially from the \$250/ton 2022 and \$125/ton 2023 averages. Reduced coal profitability will be a negative driver for FE's unregulated coal mining investment which is a material component of earnings. We maintain Underperform on shares of FE which we think are relatively expensive with long-term downside to Consensus EPS forecasts.

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Equity
United States
Utilities

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IRA: Inflation Reduction Act

ES: Eversource Energy

FE: FirstEnergy

NRG: NRG Energy

VST: Vistra Energy

XEL: Xcel Energy

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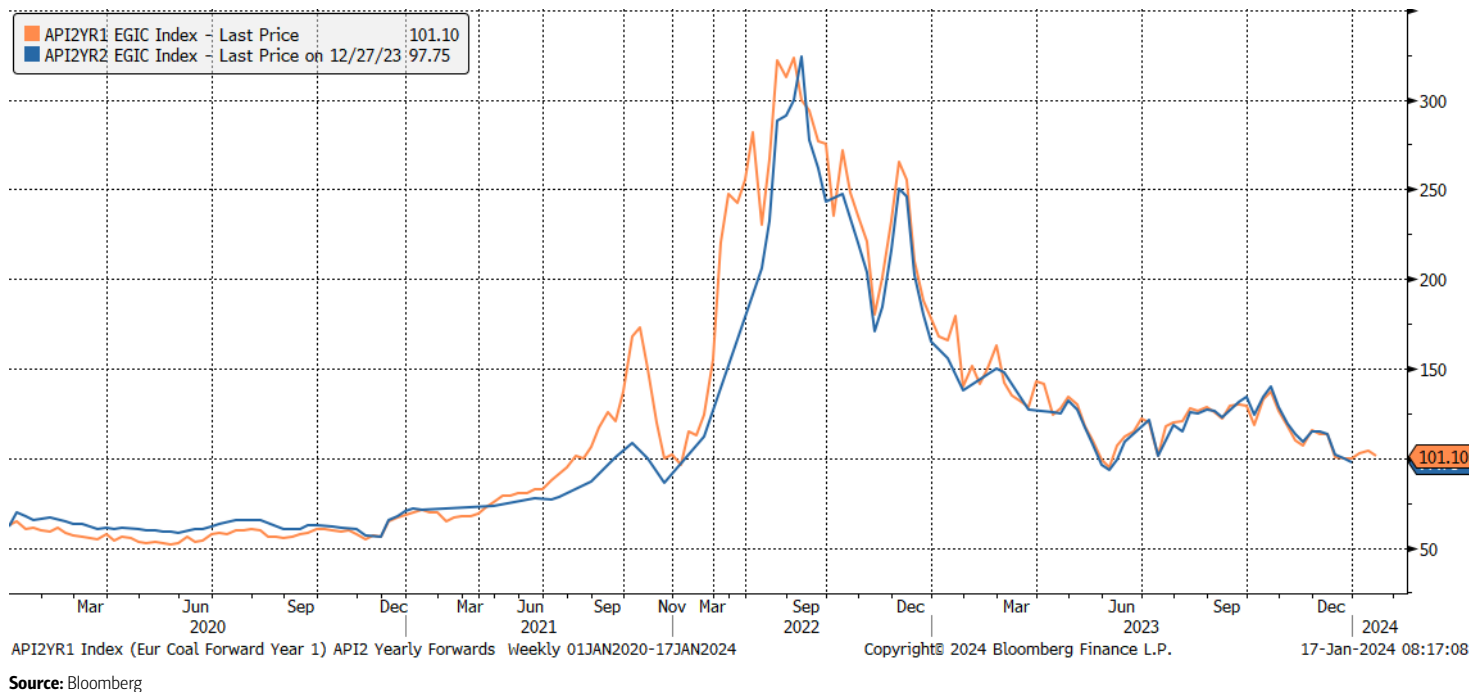
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FE: Coal pricing turns to headwind (Cont.)

Below we show European coal price futures. The reduced revenue for FirstEnergy's Signal peak coal mine investment would lead to less profitability and cash flows back to FirstEnergy. We look for details on the earnings mix for FirstEnergy between regulated utility customer payments, utility/non-utility pension income, and coal mining.

Exhibit 1: Europe Coal 6000kcal CIF ARA Forward Year 1 and Forward Year 2

Coal prices are still higher than in 2020 but have meaningfully fallen from their peak as well as 2023 levels



BofA GLOBAL RESEARCH

Texas: Solid performance from generation on Jan 14th

Texas real-time (spot) wholesale prices have remained relatively subdued on January 16 and 17 as actual demand has materialized notably below forecasts. The next six day forecast shows demand peaking at 68GW vs a low seasonal capacity available of 79GW, indicating sufficient reserves. Unplanned grid outages held at 13-15GW (15.0GW currently), higher than prior days but there were no major spikes in outages. Some natural gas resources reported fuel limitations/lack of fuel as drivers for outages. From our multiple investor conversations, the risk of losses from the winter storm is an overhang on shares of Vistra (VST) and NRG Energy (NRG) primarily. We remain comfortable on our positive views on both with Vistra in particular carrying ~2GW of excess length (ie unhedged or unencumbered) to protect for unplanned outages and/or demand spikes. Maintain Buy on shares of both VST and NRG with favorable risk-adjusted free cash flow yields.

The exhibit below shows the aggregate outages by legal entity for January 14th as Texas reports outages with a few day lag. Of our coverage universe, the most significant outages were for Vistra and NRG.

Exhibit 2: ERCOT January 14th 2024 OutagesERCOT January 14th outages in aggregate – rather than adjusting for timing

Legal Entity	Sum of Effective MW Reduction Due to Outage
LUMINANT ENERGY COMPANY LLC (DME)	2,800
EXGEN TEXAS POWER LLC (DME) – <i>Neither owned by Exelon or Constellation</i>	1,731
HANWHA TOTAL SOLAR II LLC (DME)	1,379
CALPINE POWER MANAGEMENT LLC (DME)	879
HECATE ENERGY RAMSEY LLC (DME)	729
RWE CLEAN ENERGY LLC (DME)	546
BMP WIND LLC (DME)	440
NRG TEXAS POWER LLC (DME)	438
INNERGEX RENEWABLE ENERGY INC (DME)	422
CPS ENERGY (DME)	382
ENGIE ENERGY MARKETING NA INC (DME)	345
MAVERICK CREEK WIND LLC (DME)	304
TOTALENERGIES RENEWABLES USA LLC (DME)	296
LOWER COLORADO RIVER AUTHORITY (DME)	225
MESQUITE STAR SPECIAL LLC (DME)	212
MIAMI WIND I LLC (DME)	198
HORSE CREEK WIND LLC (DME)	189
NEXTERA ENERGY RESOURCES LLC (DME)	172
RANCHERO WIND FARM LLC (DME)	166
RW MILLER POWER LLC (DME)	145
SALT FORK WIND LLC (DME)	140
OLD SETTLER WIND LLC (DME)	131
WESTERN TRAIL WIND LLC (DME)	117
NOTREES WINDPOWER LP (DME)	106
DENISON DAM (RE)	100
FORMOSA UTILITY VENTURE LTD (DME)	90
SP CACTUS FLATS WIND ENERGY LLC (DME)	90
AVANGRID RENEWABLES LLC (DME)	88
2W PERMIAN SOLAR LLC (DME)	82
ELECTRA WIND LLC (DME)	80
WATTBRIDGE ENERGY LLC (DME)	73
MP2 MESQUITE CREEK WIND LLC (DME)	72
SAN MIGUEL ELECTRIC CO OP INC (DME)	71
KARANKAWA WIND LLC (DME)	66
RE MAPLEWOOD LLC (DME)	66
PHR HOLDINGS LLC (DME)	65
DIRECT ENERGY LP (DME)	64
ORSTED ONSHORE NORTH AMERICA LLC (DME)	64
EDF TRADING NORTH AMERICA INC (DME)	62
EDF RENEWABLES INC (DME)	60
LORAIN WINDPARK PROJECT LLC (DME)	58
AVIATOR WIND LLC (DME)	57
CASTLETON COMMODITIES MERCHANT TRADING LP (DME)	40
INVENERGY WIND DEVELOPMENT LLC (DME)	40
GEUS (DME)	32
MOZART WIND LLC (DME)	30
7X DEV LLC (DME)	26
CAP RIDGE WIND II LLC (DME)	26
HORSE HOLLOW WIND III LLC (DME)	26
TAHOKA WIND LLC (DME)	25
MIDWAY SOLAR LLC (DME)	24
WILLOW SPRINGS WINDFARM LLC (DME)	20
AVANGRID TEXAS RENEWABLES LLC (DME)	18
TYLER BLUFF WIND PROJECT LLC (DME)	14
RE MAPLEWOOD 2 LLC (DME)	13
KEECHI WIND LLC (DME)	12
HEART OF TEXAS WIND LLC (DME)	11
Grand Total	14,157

Source: ERCOT

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Vistra had cumulative 2.8GW of outages reported; however, many were just for hours during the day. For example, some were from 1-5AM off peak and others were 9-10PM off peak.



Exhibit 3: Luminant Energy Company LLC (Vistra) January 14 Outage ReportsFull list of January 14th Vistra outages

Resource Unit Code	Fuel Type	Available MW Maximum	Effective MW Reduction Due to Outage	Actual Outage Start	Planned End Date	Actual End Date	Nature Of Work
LHSES_UNIT1	Natural Gas	392	392	Jan 14, 2024 1:11:00 AM	Jan 14, 2024 9:00:00 AM	Jan 14, 2024 5:15:00 AM	Other
WCPP_CT2	Natural Gas	264	264	Jan 14, 2024 9:40:00 PM	Jan 14, 2024 10:28:00 PM	Jan 14, 2024 10:28:00 PM	Other
LHSES_UNIT2A	Natural Gas	523	258	Jan 14, 2024 7:30:00 PM	Jan 16, 2024 7:30:00 PM	Jan 14, 2024 9:23:00 PM	Other
LHSES_UNIT1	Natural Gas	392	243	Jan 14, 2024 7:30:00 PM	Jan 16, 2024 7:30:00 PM	Jan 14, 2024 9:23:00 PM	Other
OECES_UNIT1	Natural Gas	217	217	Jan 14, 2024 10:12:00 AM	Jan 14, 2024 3:59:00 PM	Jan 14, 2024 11:27:00 AM	Feedwater Problems/Repairs
OECES_CT11	Natural Gas	195	195	Jan 14, 2024 10:12:00 AM	Jan 14, 2024 3:59:00 PM	Jan 14, 2024 11:27:00 AM	Feedwater Problems/Repairs
WCPP_ST1	Natural Gas	298	177	Jan 14, 2024 9:40:00 PM	Jan 14, 2024 10:28:00 PM	Jan 14, 2024 10:28:00 PM	Other
OGSES_UNIT2	Lignite	855	162	Jan 14, 2024 9:33:00 AM	Jan 14, 2024 12:13:00 PM	Jan 14, 2024 10:55:00 AM	Fuel Problems/Repairs
LHSES_UNIT1	Natural Gas	392	135	Jan 14, 2024 12:00:00 AM	Jan 17, 2024 11:59:00 PM	Jan 16, 2024 6:14:00 AM	Fuel Limitation/Lack of Fuel Availability
WCPP_ST1	Natural Gas	298	82	Jan 14, 2024 6:47:00 AM	Jan 14, 2024 7:59:00 AM	Jan 14, 2024 7:01:00 AM	Emissions
OGSES_UNIT2	Lignite	855	75	Jan 14, 2024 9:24:00 AM	Jan 14, 2024 12:13:00 PM	Jan 14, 2024 9:33:00 AM	Fuel Problems/Repairs
LHSES_UNIT2A	Natural Gas	523	74	Jan 14, 2024 12:00:00 AM	Jan 17, 2024 11:59:00 PM	Jan 16, 2024 6:19:00 AM	Fuel Limitation/Lack of Fuel Availability
OGSES_UNIT1A	Lignite	855	55	Jan 14, 2024 12:22:00 PM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 1:24:00 PM	Other
OGSES_UNIT2	Lignite	855	40	Jan 14, 2024 6:56:00 AM	Jan 14, 2024 10:00:00 AM	Jan 14, 2024 7:13:00 AM	Emissions
OGSES_UNIT1A	Lignite	855	40	Jan 14, 2024 6:58:00 AM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 7:11:00 AM	Other
OGSES_UNIT1A	Lignite	855	40	Jan 14, 2024 10:59:00 AM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 12:22:00 PM	Other
OGSES_UNIT2	Lignite	855	35	Jan 14, 2024 7:13:00 AM	Jan 14, 2024 10:00:00 AM	Jan 14, 2024 8:37:00 AM	Emissions
MLSES_UNIT2	Lignite	820	35	Jan 14, 2024 9:57:00 AM	Jan 31, 2024 11:59:00 PM	Jan 14, 2024 10:54:00 AM	Other
OGSES_UNIT1A	Lignite	855	35	Jan 14, 2024 4:22:00 PM	Jan 18, 2024 8:00:00 AM		Other
WCPP_CT1	Natural Gas	264	34	Jan 14, 2024 6:47:00 AM	Jan 14, 2024 7:59:00 AM	Jan 14, 2024 7:01:00 AM	Emissions
WCPP_CT2	Natural Gas	264	34	Jan 14, 2024 6:47:00 AM	Jan 14, 2024 7:59:00 AM	Jan 14, 2024 7:01:00 AM	Emissions
OGSES_UNIT1A	Lignite	855	30	Jan 14, 2024 7:12:00 AM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 10:58:00 AM	Other
MLSES_UNIT2	Lignite	820	30	Jan 14, 2024 10:54:00 AM	Jan 31, 2024 11:59:00 PM		Other
OGSES_UNIT1A	Lignite	855	30	Jan 14, 2024 1:24:00 PM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 4:22:00 PM	Other
COLETO_COLETOG1	Subbituminous Coal	655	25	Jan 14, 2024 1:45:00 PM	Jan 14, 2024 7:59:00 PM	Jan 14, 2024 6:53:00 PM	Fuel Problems/Repairs
OGSES_UNIT2	Lignite	855	20	Jan 14, 2024 10:59:00 AM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 4:23:00 PM	Other
COLETO_COLETOG1	Subbituminous Coal	655	15	Jan 14, 2024 11:20:00 AM	Jan 14, 2024 3:59:00 PM	Jan 14, 2024 1:45:00 PM	Fuel Problems/Repairs
OGSES_UNIT2	Lignite	855	15	Jan 14, 2024 4:23:00 PM	Jan 18, 2024 8:00:00 AM		Other
OGSES_UNIT2	Lignite	855	10	Jan 14, 2024 8:37:00 AM	Jan 18, 2024 8:00:00 AM	Jan 14, 2024 10:59:00 AM	Other
DCSES_BES3	Other	64	2	Jan 14, 2024 2:04:00 PM	Jan 19, 2024 4:00:00 PM	Jan 16, 2024 6:50:00 AM	Other
DCSES_BES4	Other	64	1	Jan 14, 2024 2:06:00 PM	Jan 19, 2024 3:59:00 PM		Other

Source: ERCOT

BofA GLOBAL RESEARCH

[US Utilities & IPPs: Latest Winter Storm Stress: Watching Texas as a Test Case 16 January 2024](#)**ES/AGR: Watching CT regulatory into legislative session**

Connecticut Governor Lamont's Chief of Staff stated the Governor Lamont has been interviewing potential candidates for nomination to the Connecticut Public Utilities Regulatory Authority (PURA). Lamont intends to nominate five nominees, which could be new Commissioners or reappointments, in an expansion from PURA's current three Commissioner total. Lamont's office target is to introduce the nominees by February 7th opening of the 2024 General Assembly session and include some candidates with financial backgrounds for confirmation by the legislature. Connecticut has been active in the past with utility legislation that has been adverse, to utility shareholders and we look to see if there are similar efforts this upcoming legislative session. If there is an expansion of PURA that would likely be positive for the regulated utilities relative to the status quo, although the mix of appointments will be a critical element.

Separately, we are closely watching the Aquarion water (Eversource Energy [ES] subsidiary) rate case appeal where a remand to PURA requesting more support and documentation for the decision, particularly cost disallowances. The timing for a Court

order is likely in the upcoming months given the advanced nature of proceeding. We have seen remands in other jurisdictions such as Florida for a lack of supporting information. The -\$2Mn rate cut ordered is currently stayed. Here as well, the details of any remand back to PURA will be important.

We maintain Underperform on shares of ES where we see material downside to Consensus and forecast an EPS rebase coming along with balance sheet repair, leading to further relative underperformance for shares.

Exhibit 4: Stocks mentioned in this report

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
XEL	XEL US	Xcel Energy	US\$ 60.42	B-1-7
FE	FE US	FirstEnergy	US\$ 37.63	B-3-7
NRG	NRG US	NRG Energy	US\$ 51.62	B-1-7
VST	VST US	Vistra Energy	US\$ 39.73	B-1-7
ES	ES US	Eversource Energy	US\$ 55.36	B-3-7

Source: BofA Global Research

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Price objective basis & risk

Eversource Energy (ES)

Our sum of the parts based price objective of \$50 uses P/E multiples on 2025E earnings. The valuation is based on a 2025 sum of the parts analysis. We apply the 2025 average peer P/Es of 13.5x electric, 13.5x natural gas, and 20.0x water. For Connecticut electric & gas utilities, we value at -20% discount (-2.8x) to reflect historical challenges and prospective earnings risks. Connecticut water is valued in-line with natural gas. The other utilities are valued at a -15% discount (-2.1x) for below-average consolidated growth and weaker balance sheet metrics. Parent net loss per share is valued at an -1x discount to the electric utility average.

Upside and downside risks to our Price Objective are 1) regulatory/political/legislative changes, 2) capital expenditures forecasts, 3) ability to earn the regulatory allowed ROE, 4) offshore wind review, 5) natural disasters & storms, 6) operational performance and gas incidents, 7) integration of historical and prospective M&A, 8) pension plan performance, and 9) equity issuances.

FirstEnergy (FE)

The \$32 Price Objective is based on a sum-of-the-parts valuation. Our multiples are driven by relative P/E premiums/discounts to the 14.3x 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. The unregulated coal mining business Signal peak is valued at 5x P/E



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 and liabilities, 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.

NRG Energy (NRG)

Our \$56 price objective is based on our 2025E sum-of-the-parts analysis. We value NRG in six parts based on approximately EV/FCF: (1) 6.5x Legacy Retail, (2) 6.0x Direct Energy, (3) 7.0x Vivint, (4) 5.5x Gas, and (5) 2.0x Coal plus Hedges. The debt and preferred stock obligations are reductions from equity value.

We value Legacy Retail at a slight premium to peers given strong competitive positioning. We value Direct Energy in line with the Legacy Retail portfolio. For Vivint, our target multiple is a discount to NRG's other retail platforms given lower free cash flow conversion. Gas value reflects fair near-term profitability opportunity but limited long-term visibility. Last, our subdued Coal value is driven by limited terminal value for the assets.

Risks to the price objective are changes in 1) commodity prices, 2) operating cost, 3) environmental requirements, 4) cost of capital, 5) retail margins and customer counts, 6) natural disasters, 7) regulatory, legislative, and political changes, 8) customer acquisition costs, 9) retail competition, 10) pension and nuclear decommissioning trust assets/liabilities, and 11) interest rates.

Vistra Energy (VST)

Our \$44 price objective is based on a 2025E SOTP valuation. For Vistra Vision, we arrive at a 7.7x blended EV/EBITDA. We apply a 9.0x EV/FCF multiple to nuclear (10.5x for Texas), which we believe fairly represents the risk/reward profile of the assets. For Renewables and Storage, we apply a 12.0x EV/FCF multiple given the accelerating nature of the end markets. For Retail, we apply a 7.0x EV/FCF multiple, consistent with peers. For Vistra Tradition, we arrive at a 4.8x blended EV/EBITDA multiple. We apply a 5.5x EV/FCF multiple to Gas Generation (7.5x for Texas) given favorable spark spreads and end market demand dynamics and a 1.5x EV/FCF multiple to Coal Generation (5.5x for Texas) which we believe appropriately captures the limited long-term value of the assets.

Downside risks to our PO are 1) changes to regulatory, political, or legislative standards, 2) wholesale power, natural gas, & capacity prices, 3) competitive & regulatory change to retail businesses, principally in Texas, 4) operational performance, 5) development of new renewables and storage assets, 6) natural disasters, 7) interest rates, 8) nuclear fuel access/cost, and 9) retail market attrition.

Xcel Energy Inc (XEL)

Our PO is \$69. We value Xcel Energy using a sum of the parts (SOTP) approach. Given the difference in geography, earnings strength, growth opportunity and risk profile, we divide the segments by subsidiary.

We use 2026E forward P/E multiple of 13.8x to derive a value for the different business segments, including the parent segment. Electric peer P/E multiple is grossed up for a year to reflect capital appreciation across the sector. We make an additional adjustment to reflect the difference in interest rate forecasts between BofA and Street as well as historical valuation sensitivity to rates.

We apply a 2x premium to XEL subsidiaries in MN and 3x for CO, 3x for NM/TX, and 3x

for WI as both utilities present solid or improving regulatory treatment with tangible investment upside. We see this multiple as appropriate as the company has growth opportunities, resolving regulatory drag and resolving uncertainty around rate cases. We also net back 50% of the parent interest expense and instead subtract out 50% of parent debt to more accurately reflect HoldCo leverage.

Risks to achievement of the price objective are interest rate changes, regulatory risk, such as lower authorized ROEs or less favorable riders/trackers for renewables and transmission, inability to deploy capital at guided levels, adverse legislation, execution delays, and weather/natural disasters

Analyst Certification

We, Julien Dumoulin-Smith and Paul Zimbardo, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective 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
	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
	Nextacker 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
	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	Cameron Lochridge
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	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
	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
	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

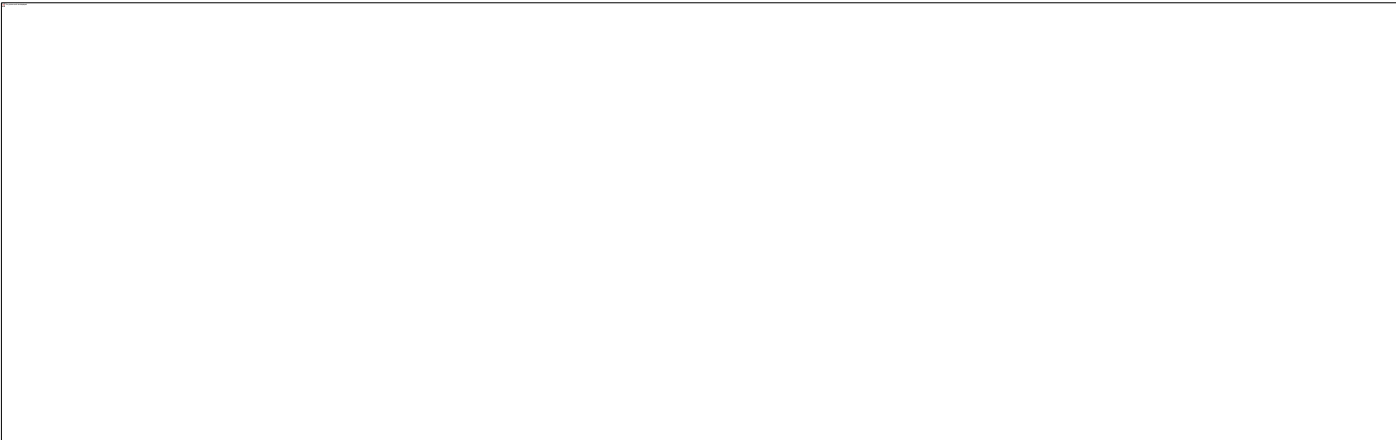
North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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	Julien Dumoulin-Smith
	Fortis Inc	FTS	FTS US	Julien Dumoulin-Smith
	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
	WEC Energy Group Inc	WEC	WEC US	Julien Dumoulin-Smith

Disclosures

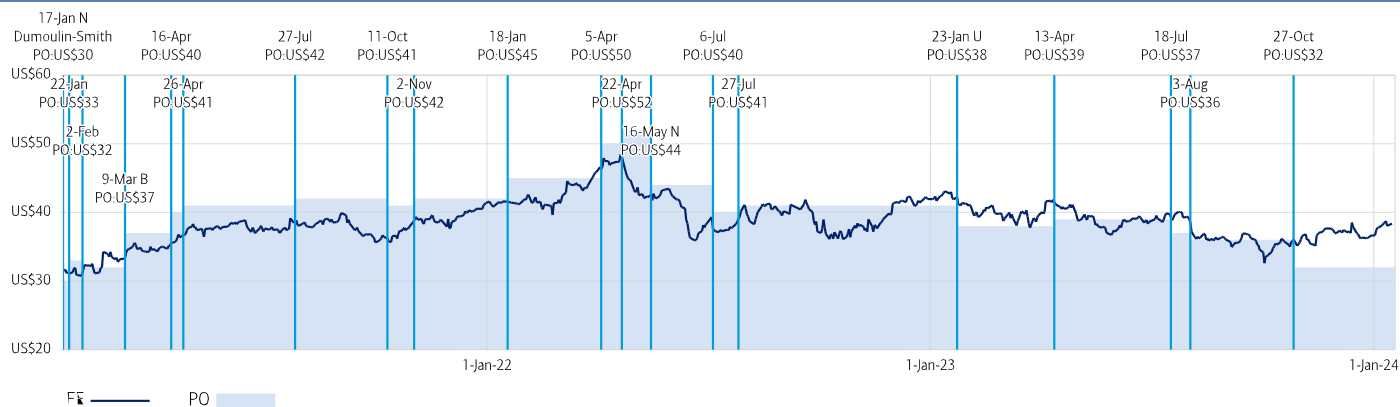
Important Disclosures

Eversource Energy (ES) Price Chart



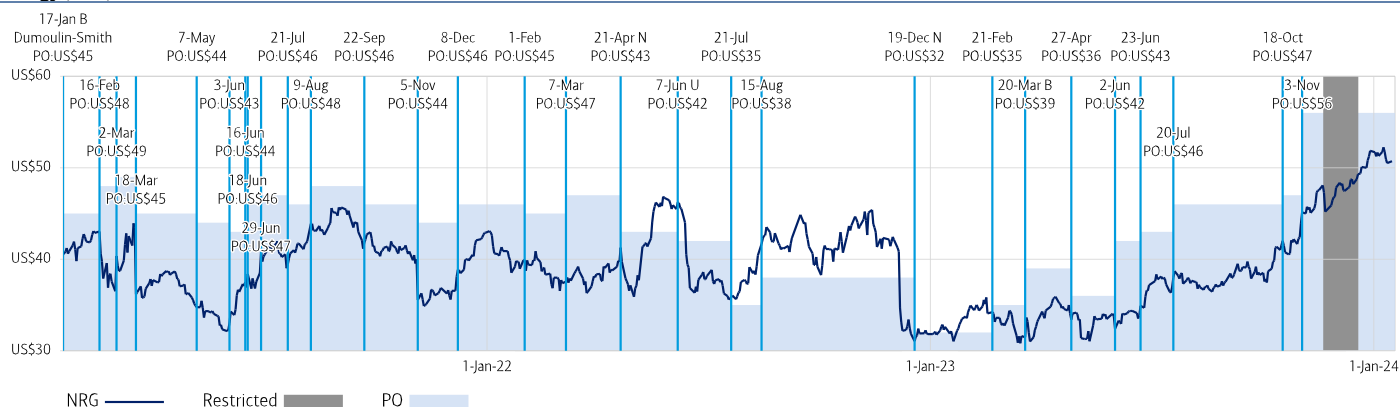
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FirstEnergy (FE) Price Chart

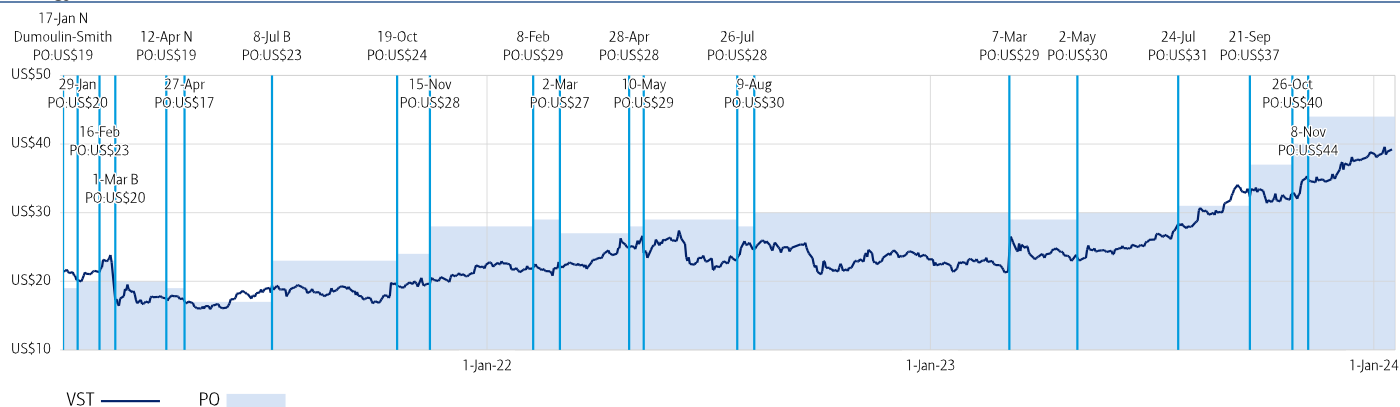
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NRG Energy (NRG) Price Chart

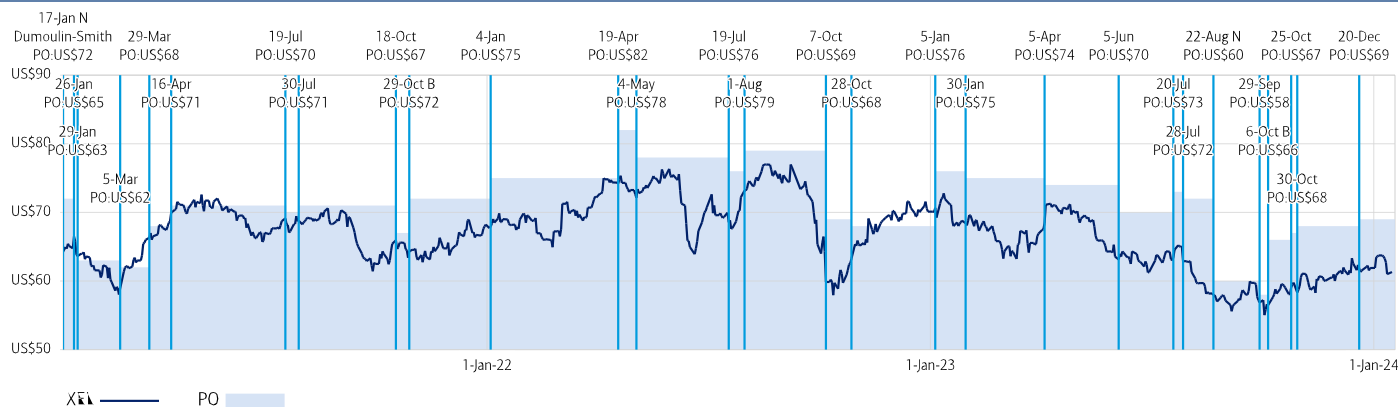
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Vistra Energy (VST) Price Chart

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Xcel Energy (XEL) 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%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Underperform	N/A	≥ 20%

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