US Utilities & Clean Tech

PowerPoint: Dominion Feedback, CMS Rate Case, SO Georgia, and Nuclear Assessment

Industry Overview

BofA NYC Conference is Today

Please see our detailed Question Bank: <u>US Utilities & Clean Tech: 2024 Utilities, Power, and & Clean Tech Question Bank: What You Need to Ask 01 March 2024</u>

D: Feedback post Investor Day

We had numerous investor conversations after diversified utility Dominion Energy's (D) Investor Day on Friday March 1st. Dominion underperformed utility peers ~6% after the update which generally fell below investors/Consensus expectations. See our initial takeaways here: D-Day Is Here: 5-7% EPS Growth Off FY25 \$3.30 Does Not Support Current Valuation. Our investor conversations were mostly cautious with a focus on two areas: (1) 7.5% consolidated and 9% Virginia rate base growth; and (2) non state regulated earnings mix. Dominion's 7.5% rate base and 5-7% EPS growth guidances are comparable to large cap peers Exelon Corp (7.5% RB and 5-7% EPS), Duke Energy (7.2% RB and 5-7% EPS), and American Electric Power (7.2% RB and 6-7% EPS). Dominion guides to an above average ~10% non-state regulated EPS mix versus Duke and Exelon substantially fully regulated (AEP ~4% generation & marketing FY24 guidance and ~2% pro-forma for pending asset sales). As a result, many investors we have spoken to have more deeply discounted the unregulated contribution. As a positive offset, Dominion's 15% FFO / Debt is notably higher than AEP 14-15%, DUK ~14%, or EXC 13-14% targets. We give management credit for the significantly enhanced disclosures and the stronger balance sheet. We look for more companies to provide granular detail and migrate towards more balance sheet cushion like Dominion has. Nevertheless, we maintain Underperform on Dominion with shares relatively expensive vs utility peers.

CMS: Reasonable electric rate case outcome slightly above ALJ

On March 1st, the Michigan Public Service Commission (PSC) issued a final order in Consumers Energy (CMS subsidiary) electric rate case with +\$92Mn rate increase (U-21389), representing +2% monthly bill increase (+\$1.53/month). This was a reasonable rate case outcome vs the +\$171Mn revised request, +\$95-105Mn Staff recommendations, and the +\$86Mn administrative law judge (ALJ). The rate order partially approved the Investment Recovery Mechanism (IRM) with CMS required to file investment plans as soon as possible. The order also approves pilot capex for strategic undergrounding. Finally, CMS is required to file an optimization analysis of line clearing in proceeding U-20697. CMS guides to filing its next electric rate case in 2Q24 and has an active natural gas rate case filed December 15th for +\$136Mn (U-21490). We maintain Buy on shares of CMS which represent one of the best risk/adjusted outlooks. See our latest here: CMS Energy: Best-in-class utility gets even better: CMS warrants the largest utility premium 08 February 2024.

04 March 2024

Equity
United States
Utilities & Clean Tech

Julien Dumoulin-Smith Research Analyst BofAS +1 646 855 5855 julien.dumoulin-smith@bofa.com

Paul Zimbardo Research Analyst BofAS +1 646 855 1470 paul.zimbardo@bofa.com

Dimple Gosai, CFA Rsch Analyst & ESG Strategist BofAS +1 646 855 3491 dimple.gosai@bofa.com

Tanner W. James, CFA Research Analyst BofAS +1 646 855 2689 tanner.w.james@bofa.com

Cameron Lochridge Research Analyst BofAS +1 337 962 0696 cameron.lochridge@bofa.com

FFO: Funds from operations

BofA Securities does and seeks to do business with issuers 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.

Refer to important disclosures on page 6 to 10. Analyst Certification on page 4. Price Objective Basis/Risk on page 3.

D: Moody's affirms Corp and SC; VEPCO negative outlook

Minutes following Dominion's Investor Day, Moody's Investor Services (Moody's) affirmed Dominion Energy Inc Baa2 credit rating with a stable outlook and 14% FFO / Debt downgrade threshold (also, affirmed Dominion South Carolina's Baa1 rating and stable outlook). Moody's stated that Dominion's new plan will meet or exceed 14% FFO / Debt through 2026, relative to Dominion's project of ~15% average annual FFO / Debt which management qualified is not fully comparable with each of the rating agency methodologies. Importantly, management emphasized that the credit metrics strengthen throughout the plan. Moody's placed the Virginia Electric Power Company A2 credit rating on negative outlook, which did not appear to be a surprise for Dominion management while the Coastal Virginia Offshore Wind (CVOW) project is under construction. No change in downgrade threshold either, consistent with mgmt's earlier comments from its update. This is key considering earlier concerns that retention of CVOW overrun risks could result in a higher risk profile from the agencies. On balance positive on affirmation; watch VEPCO still.

SO: Georgia consumer advocate? And Vogtle progress.

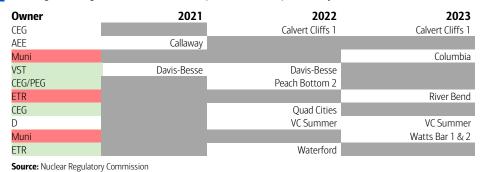
The Georgia Senate advanced Senate Bill 457 (SB457) 53-0 on February 29th, a bill that would recreate consumer utility counsel (i.e. consumer advocate). The bill will advance to the House next. If this bill is enacted we would view it cautiously for the Georgia utilities, primarily Georgia Power, Southern Company's (SO) primary subsidiary. Separately, Georgia Power announced that new nuclear Vogtle Unit 4 synchronized and connected to the electrical grid for the first time on March 1st. We maintain Neutral on shares of SO which trade at an appropriate premium with a balanced risk/reward currently. We remain doubtful such an effort will ultimately pass considering the numerous challenges to proceed thru the legislative process and note prior efforts have not proven fruitful either.

Nuclear: Detailing the latest NRC views

On March 1st the Nuclear Regulatory Commission (NRC) issued its annual performance assessments for 2023. The six reactors out of 94 that are not in the highest performance column are: Calvert Cliffs 1 (Constellation), Columbia (municipal), River Bend (Entergy), VC Summer (Dominion), Watts Bar 1 & 2 (municipal). There were favorable changes for Davis-Besse (Vistra), Peach Bottom 2 (Constellation/PSEG), Quad Cities (Constellation), and Waterford (Entergy).

We closely watch nuclear for specific operators and the industry overall. NRC events and additional oversight can signify reduced output and/or higher costs, negative developments for merchant plant profitability and regulated ratepayers

Exhibit 1: NRC Annual Performance Assessments: Reactors not in the highest performance column Showing the changes in nuclear assessment performance the past three years



BofA GLOBAL RESEARCH



Exhibit 2: Stocks mentioned

Rating and price summary

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
D	D US	Dominion Energy	US\$ 44.79	B-3-7
CMS	CMS US	CMS Energy	US\$ 58.14	A-1-7
SO	SO US	Southern Company	US\$ 66.86	A-2-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

CMS Energy (CMS)

Our \$63 PO is based on a 2026E sum-of-the-parts analysis. We use 2026E forward P/E multiples for the utility business and a 2026E forward EV/EBITDA multiple for CMS' power assets. For the utility segments, we apply a +3.0x prem to the average 2026E regulated multiple P/E of 13.0x for the electric segment and of 13.3x for the gas segment, with the 10-yr capex update providing clear sight on rate base growth and further upside, as well as continued favorable regulatory environment, and finally historically proven ability to consistently perform at the high end of guidance range. Both electric and gas peer P/E multiples are grossed up +5% to reflect capital appreciation across the sector, a consistent approach across the coverage universe. For CMS' unregulated assets we apply a blended 9x EV/EBITDA, supported by a discounted cash flow analysis at the largest asset - Dearborn Industrial Generation (DIG) The parent cost offsets are a blended of P/E and net debt approaches

Downside risks are: 1) earned ROEs declining which reduce CMS utility earnings 2) execution risk on capex and cost cutting which would primarily affect the utility earnings, 3) negatives changes to market energy prices which could affect the DIG plant's ability to re-contract at the assumed prices, 4) regulatory, legislative, or political changes, 5) interest rates, 6) natural disasters and storms, and 7) pension plan performance.

Dominion Energy (D)

We value Dominion Energy at \$40 using a 2026E sum-of-the-parts analysis. For the utilities we apply the comparable 13.5x electric peer multiples which we gross-up by 5% to reflect capital appreciation across the sector. We apply -1.5x discount for base Virginia and -1.0x for South Carolina. We apply discount adjustments to lower value utility sources in South Carolina (NND nuclear and bill credits). The pension income is valued 4x P/E, consistent with the 12/31/22 valuation levels.

Contracted assets are valued using 2026 EV/EBITDA: 5x Millstone (13% FCF Yield), and 5x for renewables. For remaining debt beyond that allocated to state utilities, we include a 50% weight towards a straight netting of leverage, with the remaining 50% using a P/E multiple on associated interest expense, in line with the methodology employed for diversified utilities with relatively higher levers of leverage. The interest rate hedge is valued at the stated \$1Bn value 9/30/23 less tax.

Risk to achievement of the Price Objective are 1) regulatory, legislative, and political actions, 2) ability to earn or exceed the regulatory allowed ROE, 3) capital markets and equity requirements, 4) changes to the capital expenditure and rate base forecast for both regulated & unregulated segments, 5) volatility in interest rates and pension returns, 6) changes in commodity prices, 7) natural disasters, nuclear accidents, and weather, 8) nuclear performance, 9) inflation, & 10) offshore wind construction.



Southern Company (SO)

Our \$70 PO is derived from a sum-of-the-parts analysis (SOTP). We use a P/E valuation approach on 2026 estimates and use peer multiples of 14.2x for electric and 13.8x for gas, respectively (with dis/prem applied per asset depending on growth/risk): we then gross up these multiples by +5% to account for sector wide EPS growth to derive a 12-month forward PO. We also apply an adjustment factor to reflect slightly higher interest rate expectations than Street consensus. We subtract 50% of the 2026 parent interest expense multiple by an electric P/E peer multiple to reflect parent leverage supporting the utilities. We net out total parent drag and add back the remaining parent interest expense with a 50% weighting.

Upside/downside risks to achievement of the PO are: 1) Vogtle construction timing and costs, 2) regulatory, political, and legislative changes, 3) ability to earn the allowed rate of return, 4) changes to the capital expenditure forecast, 5) nuclear incidents, weather, and natural disasters, 6) rate of customer and sales growth, 7) O&M trends, 8) interest rates, 9) environmental policies and regulations, 10) M&A, and 11) interest rates.

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.

Special Disclosures

BofA Securities is currently acting as Financial Advisor to CMS Energy Corp regarding the sale of its home services business which was announced February 5th, 2024.



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 ENLT	DTE US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd		ENLT US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	XENLF	ENLT IT	Julien Dumoulin-Smith
	Entergy	ETR	ETR US FSLR US	Paul Zimbardo
	First Solar, Inc.	FSLR FLNC	FLNC US	Julien Dumoulin-Smith
	Fluence Energy	HASI	HASI US	Julien Dumoulin-Smith Julien Dumoulin-Smith
	Hannon Armstrong MDU Resources Group, Inc.		MDU US	•
	12	MDU		Julien Dumoulin-Smith
	Nextracker Inc NiSource Inc	NXT NI	NXT US NI US	Julien Dumoulin-Smith Julien Dumoulin-Smith
		NWE	NWE US	Julien Dumoulin-Smith
	NorthWestern Energy Group 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
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	Sempra	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 Corp	VST	VST US	Julien Dumoulin-Smith
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
	Acci Energy inc	ALL	ALL 03	Juneil Bulliouill Sillier
NEUTRAL				
	AES	AES	AES US	Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Paul Zimbardo
	Algonquin Power & Utilities Corp	YAQN	AQN CN	Paul Zimbardo
	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
	ChargePoint Holdings	CHPT	CHPT US	Cameron Lochridge
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Duke Energy	DUK	DUK US	Julien Dumoulin-Smith
	Emera Inc	YEMA	EMA CN WTRG US	Julien Dumoulin-Smith
	Essential Utilities	WTRG		Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith
	Exelon Congress Holdings Inc.	EXC GNRC	EXC US	Paul Zimbardo
	Generac Holdings Inc.		GNRC US	Julien Dumoulin-Smith
	Hydro One	YH	H CN	Julien Dumoulin-Smith
	Idacorp Maxeon Solar Technologies	IDA MAXN	IDA US MAXN US	Paul Zimbardo Julien Dumoulin-Smith
	<u> </u>			•
	NextEra Energy	NEE NEP	NEE US	Julien Dumoulin-Smith Julien Dumoulin-Smith
	NextEra Energy Partners	NEP OGE	NEP US OGE US	Julien Dumoulin-Smith Julien Dumoulin-Smith
	OGE Energy Corp		ORA US	Julien Dumoulin-Smith
	Ormat Technologies	ORA PNW	PNW US	•
	Pinnacle West	PNW	PNW US POR US	Julien Dumoulin-Smith Julien Dumoulin-Smith
	Portland General Electric Company			•
	Southern Company	SO SWV	SO US	Julien Dumoulin-Smith
	Southwest Gas Holdings	SWX TAC	SWX US TAC US	Julien Dumoulin-Smith Julien Dumoulin-Smith
	TransAlta Corporation	YTA	TAC US TA CN	Julien Dumoulin-Smith
	TransAlta Corporation	TIA	IA UN	Julieti Duffiouilli-SIIIIUI
UNDERPERFORM				
	Allete Inc	ALE	ALE US	Julien Dumoulin-Smith



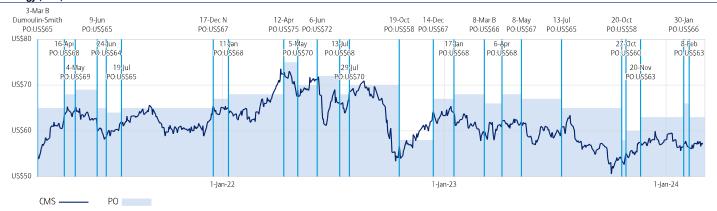
North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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
	Bloom Energy	BE	BE 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
RVW				
	New Fortress Energy	NFE	NFE US	Cameron Lochridge

Disclosures

Important Disclosures

CMS Energy (CMS) Price Chart

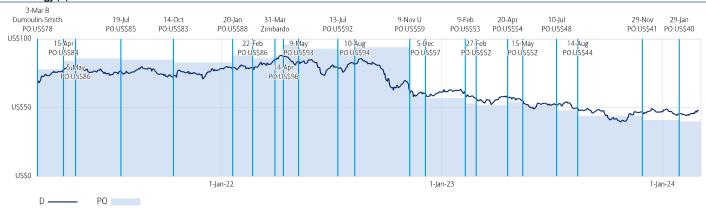


B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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.



Dominion Energy (D) 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.

Southern Company (SO) 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 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.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

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%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed. BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: CMS Energy, Dominion Energy, Southern Company.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: CMS Energy, Southern Company.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: CMS Energy, Dominion Energy, Southern Company.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: CMS Energy, Dominion Energy, Southern Company. The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: CMS Energy, Dominion Energy, Southern Company. BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: CMS Energy, Dominion Energy, Southern Company.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: CMS Energy,

Dominion Energy, Southern Company.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of

the report: CMS Energy, Dominion Energy, Southern Company.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: CMS Energy, Dominion Energy, Southern Company.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: CMS Energy, Dominion Energy, Southern

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments. Refer to BofA Global Research policies relating to conflicts of interest.

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA), BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch (Hong Kong): Merrill (Hong Kong): Merr (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch (SA. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company:



R2 Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India yang by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Se

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research



and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

