The Henry Fund
Henry B. Tippie College of Business
Matthew Hodges [matthew-hodges@uiowa.edu]

Ameren Corporation (AEE)

November 12, 2021

Utilities

Stock Rating **BUY**

Investment Thesis

Our modeling produces a price range between $121 and $127, for a potential upside between 42% and 49%. High capital spending, anticipated inflated electricity pricing, and strong external economic tailwinds portend high revenue, making us bullish on AEE's near term performance.

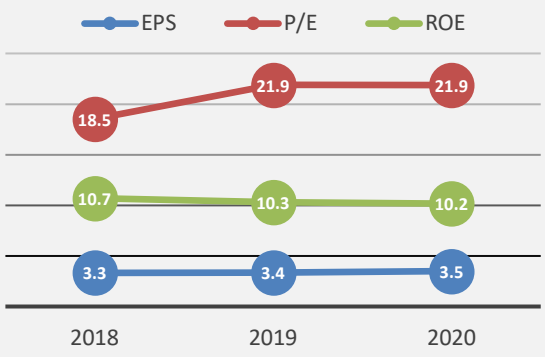
Drivers of Thesis

- Ameren projects $16.4 to $17.8 billion in capital expenditures over the next five years. This will lead to increased and improved operations, which will boost Ameren's revenue and expand total operations. Coupled with improving margins and a solid credit rating, AEE's projected growth and transition to carbon neutral operations by mid-century seem attainable.
- Natural gas and electricity prices are expected to increase over the forecast period. This will increase input costs for electricity produced by natural gas, but those costs will be passed onto the consumer. Ultimately, higher prices will lead to higher revenue for Ameren.
- New housing starts and the industrial production index are expected to increase, which will create demand for Ameren's products and grow the revenue for the company.

Risks to Thesis

- Inflation could cause interest rates to climb steeply, which would raise borrow costs and hamper NEE's ambitious capital projects.
- A slower recovery from the Covid-19 pandemic could slow the growth opportunities for Ameren.
- Revenue growth for the industry has been sluggish of late. Should regulators not allow rate increases to offset rising input costs, margins could be hurt.

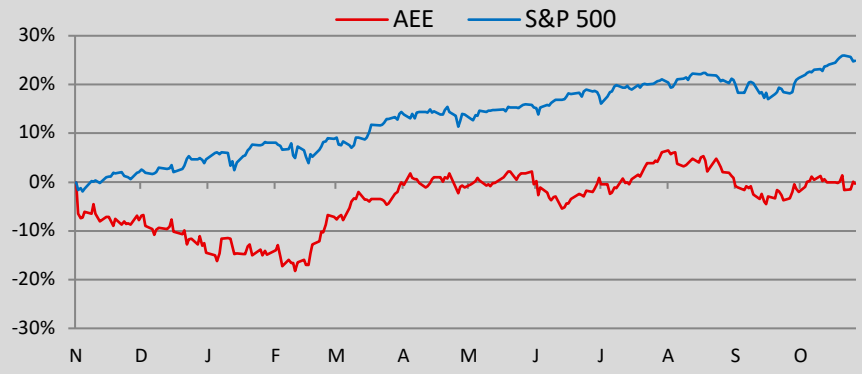
Target Price	$121-127
Henry Fund DCF-EP	$127
Henry Fund DDM	$121
Relative Multiple	$63
Price Data	
Current Price	$84.55
52wk Range	$69.79 – 90.77
Consensus 1yr Target	$89.77
Key Statistics	
Market Cap (B)	$22.0
Shares Outstanding (M)	253.3
Institutional Ownership	77.0%
Beta	0.49
Dividend Yield	2.4%
Est. 5yr Growth	7.9%
Price/Earnings (TTM)	21.2
Price/Earnings (FY1)	22.0
Price/Sales (TTM)	3.6
Price/Book (mrq)	2.3
Profitability	
Operating Margin	22.4%
Profit Margin	15.1%
Return on Assets (TTM)	2.9%
Return on Equity (TTM)	10.2%



Earnings Estimates

Year	2018	2019	2020	2021E	2022E	2023E
EPS	$3.37	$3.35	$3.50	$3.82	$4.04	$4.34
HF est.				$3.85	$3.91	$3.94
growth	*54.63%*	*-0.6%*	*4.5%*	*10.00%*	*1.55%*	*0.76%*

12 Month Performance

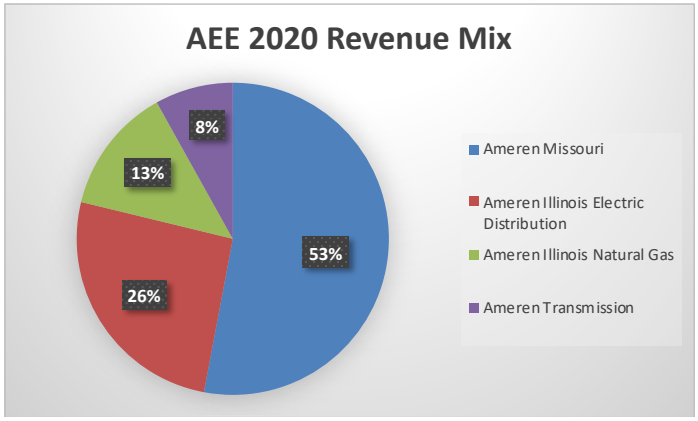


Company Description

Ameren Corporation operates a public utility holding company, providing rate-regulated electric and natural gas power to residential, commercial, and industrial customers in Illinois and Missouri. Their electric generation capacity includes a mix of sources, ranging from fossil fuel heavy coal and natural gas, nuclear power, and renewables such as hydroelectric, wind, and solar. The company was founded in the late nineteenth century and is headquartered in St. Louis, Missouri.

COMPANY DESCRIPTION

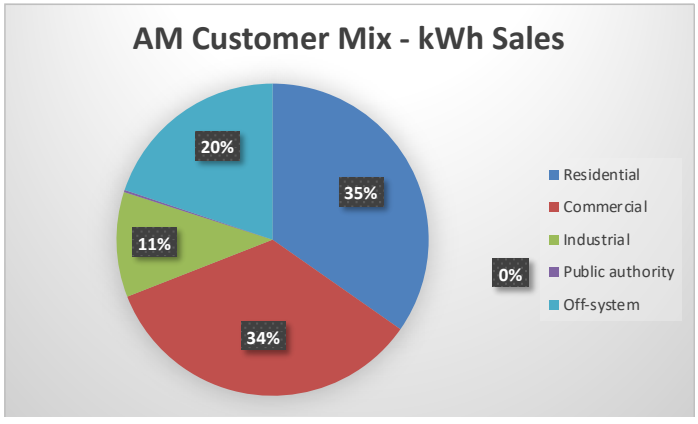
Ameren Corporation operates a public utility holding company, providing rate-regulated electric and natural gas power to residential, commercial, and industrial customers in Illinois and Missouri. Their electric generation capacity includes a mix of sources, ranging from fossil fuel heavy coal and natural gas, nuclear power, and renewables such as hydroelectric, wind, and solar. The company was founded in the late nineteenth century and is headquartered in St. Louis, Missouri. Ameren employs just over 9,000 full time employees. Other than the electric/natural gas segmentation, the company can be broken down regionally between Ameren Missouri, Ameren Illinois Electric Distribution, Ameren Illinois Natural Gas, and Ameren Transmission. Historically, revenue mix among these divisions have been 56%, 25%, 13%, and 6%, respectively.[1, 2]



Source: 2020 AEE 10-K Report

Ameren Missouri

For 2020, the Ameren Missouri (AM) division produced just over 38,000 kilowatt-hours for the central and eastern portion of the state, although they do have service area

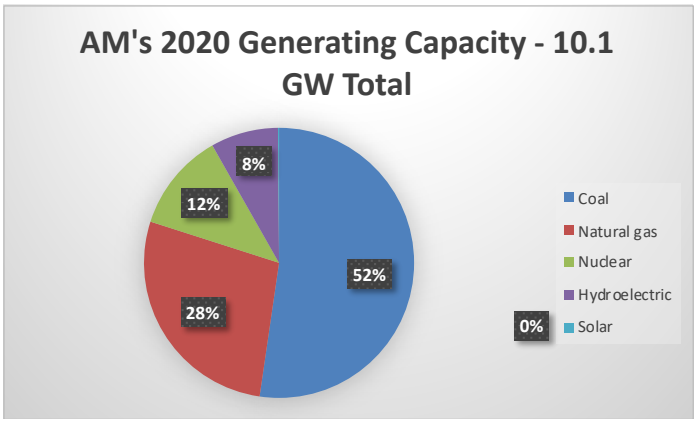


Source: 2020 AEE 10-K Report

north of Kansas City. Residential and commercial customers make up the lion's share of AM's customer base, representing 35% and 34% respectively of 2020's kilowatt-hour sales. An additional 11% of the sales are made up of industrial customers and a fairly high percentage of 20% are "off-system" customers, entities purchasing power from AM that are not a part of their native load system.



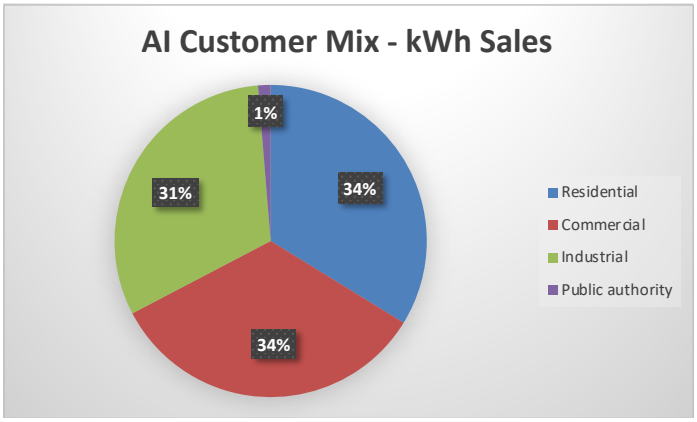
Generating capacity for AM for 2020 is still fossil fuel intensive. In 2020, coal represented over fifty percent of their generating capacity, with natural gas putting the two fuel type's combined total to 80%. Nuclear and hydroelectric make up the remainder of the 20% generating capacity, with solar producing a very meager 13 megawatts or about 1/10th of one percent of AM's total. In September of last year, AEE committed to producing net-zero emissions by mid-century, which includes nearly $8 billion investments in renewable sources (mainly wind and solar). They do not have plans to retire their fossil fuel generating capacity, however, but will rely on new technologies to capture carbon. Ameren Illinois does not own its generation capacity but acquires its generation resources through a procurement process from the state or through other electricity suppliers.[1]



Source: 2020 AEE 10-K Report

Ameren Illinois

Ameren Illinois (AI) sold nearly as many kilowatt-hours as AM for 2020, coming in just over 34,000 kWh sold to customers in the southern two-thirds of the state. Similar to Ameren Missouri, the lion's share of AI's customer mix is made up of residential and commercial customers, each representing 34% of the kWh's produced for the year. Unlike AM, AI does not sell to off-system customers, but they do have a slightly larger public authority customer base (442 kWh sold versus 88 kWh) and AI produces over twice as much for Illinois' industrial sector than AM does for Missouri's (10,674 kWh versus 4,158 kWh). Public authority and industrial customers represent 1% and 31% of AI customer kWh sales mix.[1]



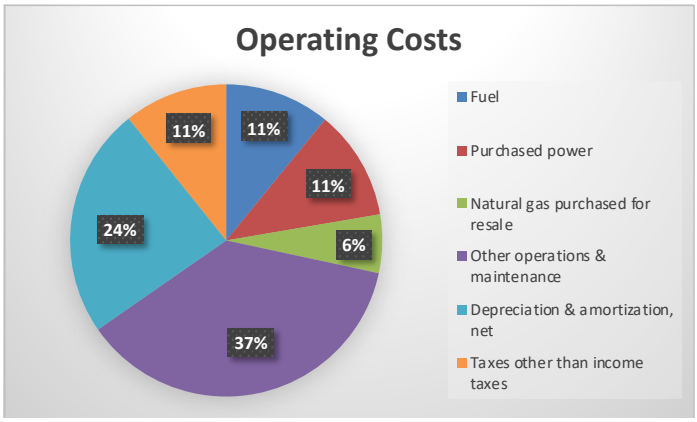
Source: 2020 AEE 10-K Report

Ameren Transmission

Ameren Transmission of Illinois (ATXI) operates a rate-regulated transmission business on the Regional Transmission Organization (RTO) Midcontinent Independent System Operator (MISO), servicing 544 miles of transmission lines. AM and AI each service 3,150 and 4,662 miles of transmission lines respectively to satisfy the needs of their utility networks. ATXI is the fastest growing revenue stream for AEE, having grown 17% in 2020, but it only represents 8% of AEE's total revenue.[1]

Cost Structure

Roughly two-thirds of AEE's operating costs consist of fuel, purchased power, and operation & maintenance (O&M) costs. Depreciation and amortization make up another 24%, with taxes other than income taxes accounting for 11%. For the historic period, operating costs averaged 77.6% percent of total revenue, where we have them



Source: 2020 AEE 10-K Report

slightly lower at 75.6% for the forecast period. Pandemic-related cost cutting measures and AEE's performance through the first three quarters of 2021 justify this slight reduction.[1]

ESG Analysis

AEE scores a 29.1 on the Sustainalytics overall ESG scoring metric. This puts them in the upper end of the *Medium* scoring range and ranks them 186th out of 635 companies in the utilities sector. Specifically, the company as a *High* exposure rating and a *Strong* rating for management response to ESG risk. Among its peers, Ameren sits in the middle of the pack. Alliant has the best overall rating at 22.4, but the rest of the group comes in between 27 and 32, giving Alliant by far the best score and putting them 78th among all utility companies. The entire group has *High* exposure and *Strong* management response to ESG risk.[3]

Sustainalytics	Score	Rank	Risk Level	Exposure	Mgmt
AEE	29.1	186	Medium	High	Strong
NRG	31.8	225	High	High	Strong
EIX	27.4	151	Medium	High	Strong
D	28.2	165	Medium	High	Strong
AEP	30.7	209	High	High	Strong
LNT	22.4	78	Medium	High	Strong

Source: sustainalytics.com

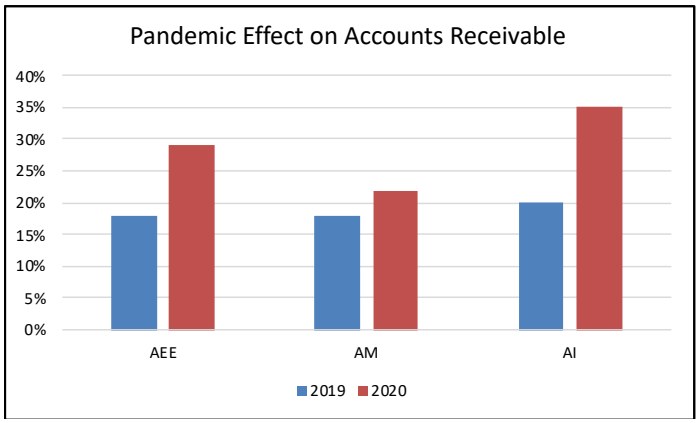
RECENT DEVELOPMENTS

Earnings Announcement

AEE reported $425 million in earnings for the third quarter of 2021, for basic earnings per share of $1.66 for the quarter. For the nine months ending September 30th, AEE has brought in $865 million in earnings for year-to-date EPS of $3.38. This compares to $1.48 year-over-year for the quarter and $3.06 year-over-year for the first three quarters of the fiscal year. The performance beat consensus by $0.04 per share for the quarter and caused management to revise their guidance upward for 2021 diluted EPS from between $3.65 and $3.85 to between $3.75 and $3.95. Management's guidance assumes a number of operating and economic conditions, including normal temperatures to close the year, limited impact from the pandemic, and favorable Treasury bond yields.[4]

COVID-19 Impact

In 2020, AEE saw a net decrease in sales, an increase in past due or deferred payment arrangement A/R balances, and a decline in cash collections from customers, all largely explained by the pandemic. For example, at the end of 2020, A/R balances that were 30 days or great past due or that were in deferred arrangements accounted for 29%, 22%, and 35% of AEE's, AM's, and AI's receivables before allowance for doubtful accounts. A year prior, in 2019, those numbers were 18%, 18%, and 20%, respectively. At the start of the pandemic, when shelter-in-place orders began, roughly 65% percent of AEE's workforce transitioned to remote working arrangements, with 50% still in such situations at the release of 2020's 10-K report (February 2021).[1]

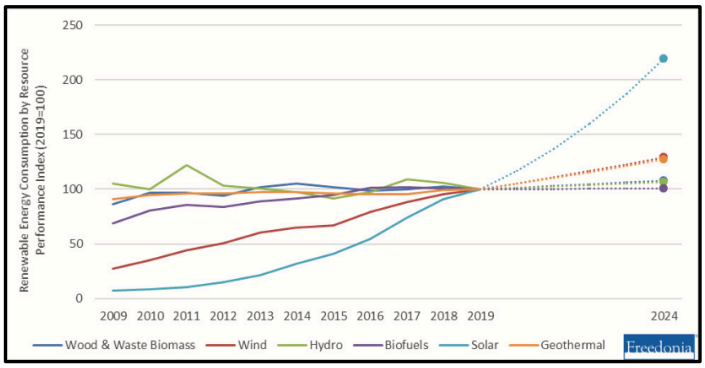


Source: 2020 AEE 10-K Report

Industry Trends

Renewables

Renewable energy consumption grew to a record high of 11.6 quadrillion Btu in 2020, representing 12% of US energy usage with its fifth straight year of growth. From 2009 to 2019, the industry saw an average annual growth of 3.9%. Production usually outpaces consumption to fulfill market demand. For 2019, production reached 11.8 quadrillion Btu and had a 4.1% average annual growth rate from 2009 to 2019. Total consumption and production of renewables is expected to reach 14 and 14.2 quadrillion Btu by 2024, respectively, for a 4.0% and 3.8% CAGR for each. The largest gains are expected in wind and solar, with 5.3% and 17% estimated CAGR.[5]



Source: Freedonia Group – Renewable Energy: US

Removal of the Clean Power Plan (CPP) may slow renewable energy's exponential growth, but regional and local commitments to renewable energy may offset the loss of federal leadership. Regardless, wind and solar are not expected to surpass 20% of total electricity generating capacity by 2026. As of May 2021, 29 states had implemented Renewable Portfolio Standards (RPS), requiring utilities to increase their percentage of generation from renewables and thus increasing capital expenditures to build out that infrastructure. These costs were offset by subsidies and tax incentives.[6]

Two important tax credit incentives are the Renewable Electricity Production Tax Credit (PTC) and Solar Investment Tax Credit (ITC). Each credit operates a little different from the other, with the PTC offering a 1 cent/kWh produced credit toward federal corporate taxes and the ITC providing a credit of 22% of the installation cost of solar systems whose construction commenced in 2021. The PTC was recently phased down to 40% of its original starting amount of 2.5 cents/kWh in 2019 and will be completely phased out for any new capacity completed

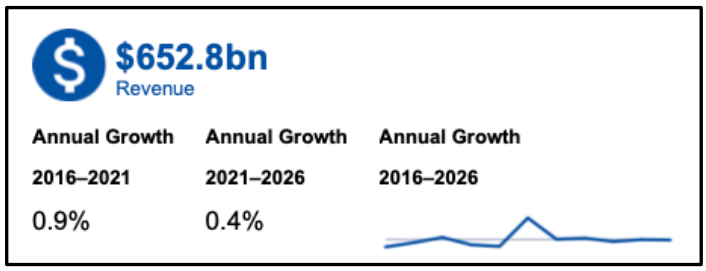
after the end of this year. Companies receive this incentive for the first ten years of the life of the generating asset. The ITC has also phased down from an original 30% credit in 2020 for systems coming online and 26% for systems whose construction commenced that year. It will continue to drop to 10% next year for systems commencing construction and will be 10% for any system stat does not begin service until 2023 regardless of the year construction started.[7, 8]

Regulations

This industry is regulated by the Federal Energy Regulatory Commission (FERC) at the federal level and public utilities commissions (PUCs) at the state level. Regulation is very high for this industry, as safety and environmental health are major concerns surrounding the industry's products and services. While the regulatory load is heavy on the industry, it also receives a lot of support from the government in the form of credits and other tax incentives. Prices and investment return levels are set by the government, which can limit the performance of the industry, but the governments involved are seeking safe, healthy, and stable utility systems, so successful performance is incentivized for all parties involved.[6]

Sluggish Revenue Growth, Yet Hopeful

Revenue growth over the previous five years has slowed due to a number of factors. These include declining population growth, household use of energy efficient technologies, stagnant manufacturing performance, electricity price growth that has not kept up with inflation, and natural gas prices that have declined. Positive performance in renewables have been a positive for the industry, but wind and solar, which are both expected to grow significantly over the forecast horizon, only account for a minor section of the industry revenue.

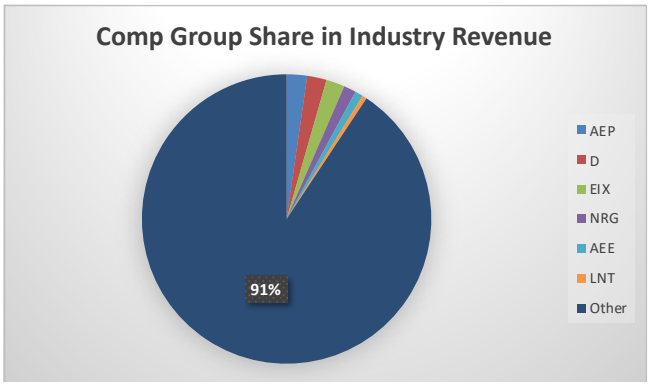


Source: IBIS*World* – Utilities in the US

Forecasted revenue growth will be driven by electric power generation and transmission growth that is expected to be higher than the previous five-year period. General growth in the broader economic will also help with demand, but the energy efficiency push will act as a headwind to this trend. In addition to electric power generation and transmission, natural gas is anticipated to grow, annualized at 0.5% over the coming 5-year period. Finally, continued recovery from the pandemic will help growth at the beginning of this period. Growth in natural gas will help that industry segment rebound from recent declines, and the retirement of tax incentives for renewables and the Clean Power Plan (CPP) may slow coal's demise, at least in the short term.[6]

MARKETS AND COMPETITION

Companies operating in the utilities sector provide a variety of utility services, including electric power generation and transmission, natural gas distribution, steam supply, water supply, and sewage removal. These industries can be very different and even countervailing. Overall, the sector is dominated by electric power generation and transmission. Sector growth improved marginally over the five years leading to 2021, at an annualized rate of 0.9% to $652.8 billion. In the five years following 2021, that rate is expected to decrease to 0.4% to $664.5 billion by 2026. Renewables are still expected to make inroads in the market to the detriment of natural gas and coal, especially, but the price of natural gas will likely rebound after a sluggish time of late. The industry breaks down by products and services three ways: 1) electric power generation (18.6% revenue); electric power transmission and distribution (50.4%); and, other (31.0%). Sewage and water treatment accounts for a large part of the "other" category.[6]



Source: IBIS*World* – Utilities in the US

Market Share

Companies in the utilities sector are typically major players in their respective regional and local markets. The top four

companies account for only 12.5% of sector revenue, with the companies compared in this analysis comprising only 9% of the market (see chart above).[6]

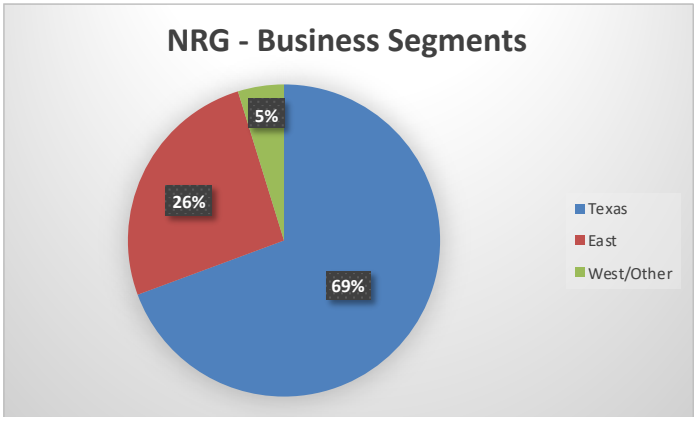
We compare AEE to five other utility companies that primarily serve as rate regulated public utilities, including NRG Energy, Incorporated (NRG), Edison International (EIX), Dominion Energy, Incorporated (D), American Electric Power, Incorporated (AEP), and Alliant Energy Corporation (LNT). The following table shows each company's performance in price-to-earnings ratio, EPS for the first three quarters of 2021, return on equity, operating margin, and market capitalization. AEE shares the top spot for operating margin with LNT at 21.8%, where it runs in the middle of the road in the other metrics. AEE is currently valued at $22B market cap.[9, 10]

	P/E	EPS	ROE	Op. Margin	Mrkt Cap.
AEE	21.2	3.82	10.2%	21.8%	22.0
NRG	18.1	9.96	30.6%	17.3%	8.9
EIX	27.6	2.01	5.4%	11.2%	24.9
D	22.6	3.23	5.1%	21.6%	61.2
AEP	16.9	4.75	11.0%	20.2%	42.4
LNT	22.1	2.52	11.1%	21.8%	14.0

Source: macrotrends.net, FactSet

NRG Energy, Inc. – $35.70 (-8.4% YTD)

NRG Energy is somewhat the Walmart of energy/utility companies. In addition to producing, selling, and delivering electricity to residential, commercial, and industrial customers throughout the state of Texas, the company trades in energy commodities, environmental products, weather products, and financial products, as well as provide services in fuel procurement, transportation, and the direct sell of retail energy products. This is largely a function of the loose regulator environment of the Texas power grid, managed by ERCOT. Their electricity power generation comes from natural gas, coal, oil, solar, and nuclear, along with back-up capacity through battery storage. Brands under NRG management include Reliant, Green Mountain Energy, Stream, and XOOM Energy, among others. The company is headquartered in Houston and was founded in 1989. Decomposed in the chart above, NRG operates in three major segments: Texas, East, and West/Other for 2020.[11]



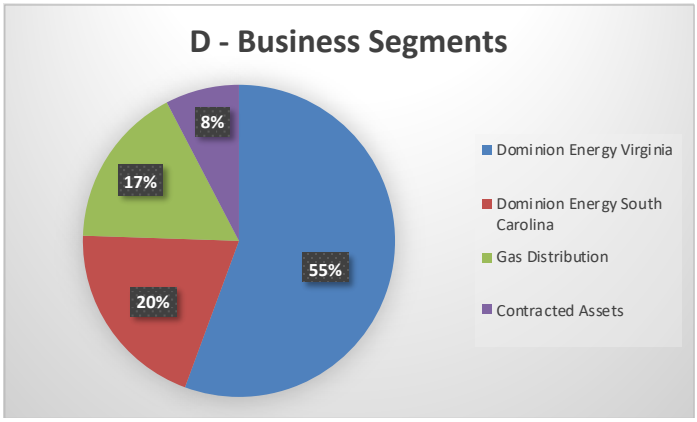
Source: FactSet

Edison International – $64.24 (+3.1% YTD)

Edison International generates and distributes electric power to 15 million residential, commercial, and industrial customers in Southern, Central, and Coastal California. They also provide energy solutions to any of their commercial or industrial customers looking to upgrade their energy consumption systems. The company is headquartered in Rosemead, California, and was founded in 1886.[11] EIX operates in only one segment, according to FactSet, getting revenue from the *Electricity* segment.[9]

Dominion Energy, Inc. – $74.74 (+2.15% YTD)

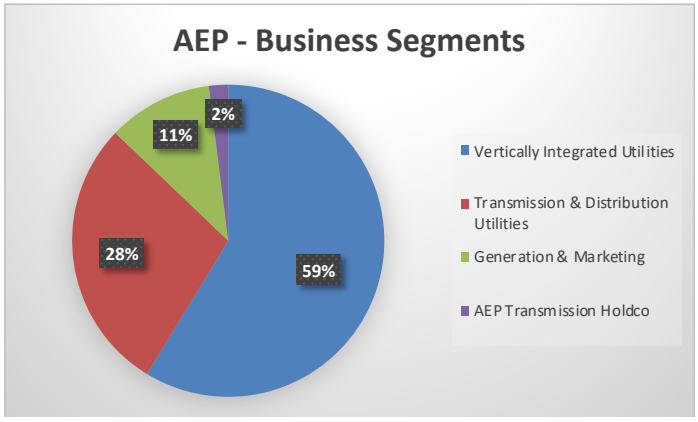
Founded in 1983 and headquartered in Richmond, Virginia, Dominion Energy produces and distributes electric and natural gas energy in Virginia and the Carolinas. They serve approximately 7 million residential, commercial, and industrial customers between the three states. In addition to their regional segmentation, the company operates a Contracted Assets segment that provides energy marketing and price risk services. Dominion sells energy to both electric cooperatives and municipalities, as well as to wholesale energy exchanges.[11] Dominion operates in four major segments: Dominion Energy Virginia, Dominion Energy South Carolina, Gas Distribution, Contracted Assets, decomposing for 2020:



Source: FactSet

American Electric Power – $82.02 (+3.6% YTD)

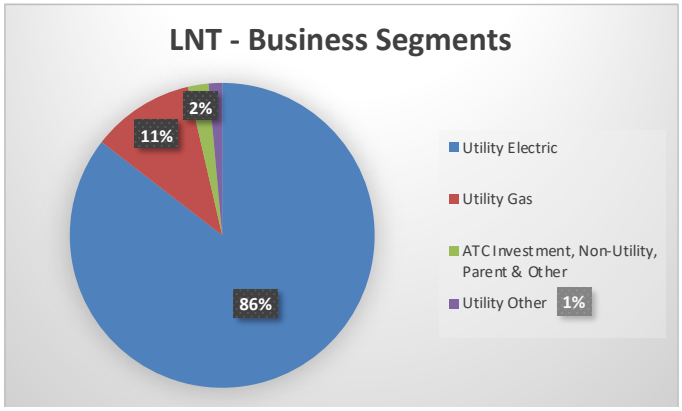
AEP generates, transmits, and distributes electricity to retail and wholesale customers in the United States. Its operating segments include Vertically Integrated Utilities, Transmission and Distribution Utilities, AEP Transmission Holdco, and Generation & Marketing. It uses traditional power generation means of coal and lignite, natural gas, nuclear, and hydroelectric, as well as renewables solar and wind. In the wholesale markets, AEP sells to other electric power companies, rural electric cooperatives, municipalities, and other market participants. They own, lease, or control approximately 3,016 railcars, 411 barges, 6 towboats, and coal handling terminals with 18 million tons of annual capacity. The company was founded in 1906 and is headquartered in Columbus, Ohio.[11] AEP operates in four major segments: Vertically Integrated Utilities, Transmission & Distribution Utilities, Generation & Marketing, and AEP Transmission Holdco, decomposing as such for 2020:



Source: FactSet

Alliant Energy Corp – $55.29 (+12.0% YTD)

Alliant Energy Corporation operates as a utility holding company, providing regulated electricity and natural gas services to customers in Iowa and Wisconsin in the retail market and Illinois, Iowa, Minnesota, and Wisconsin in the wholesale market. Like AEP, Alliant owns and operates significant transit assets, as well as offers freight brokerage and logistics management services. The company was incorporated in 1981 and is headquartered in Madison, Wisconsin.[11] LNT operates in four major segments: Utility Electric, Utility Gas, ATC Investment, Non-Utility, Parent & Other, and Utility Other (see above).

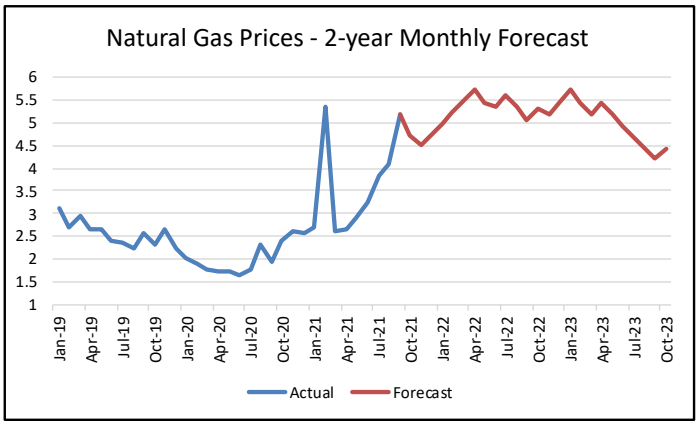


Source: FactSet

ECONOMIC OUTLOOK

Electric and Natural Gas Prices

Prices play a key role for utilities, especially the price of electricity and the price of natural gas. The price of electricity is expected to increase in 2021, which may curtail demand, but will be an opportunity for higher revenue for electric transmission utilities for the year. The price of natural gas, which is also expected to increase, can drive profits higher as the price increases, especially for utilities that generate electricity from natural gas, as opposed to just deliver natural gas to customers.[6]



Source: IBIS*World* – Utilities in the US

Historically, the price of electricity has been both input and demand sensitive. After the 2008 financial crisis, electric power prices fell mainly as a reduction in the input costs of natural gas and coal fell during that time but demand stayed relatively steady cause electricity is one of the last cost-saving measures of businesses in a crunch and one of the first to be used again after a downturn. Natural gas and coal prices steadily rebounded until a sharp downturn in 2014 and 2015, when renewable sources of electricity began to gain significant market penetration. Fortunately for electric producers, economic growth remained steady during this period, so the price of electricity was less

effected than the price of natural gas and continued to see modest gains up to 2020.

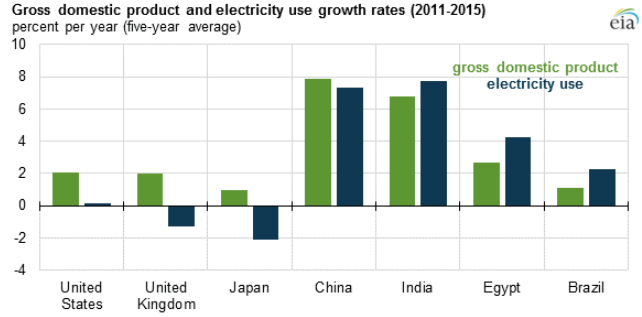
IBIS*World* forecasts the price of electricity to increase at an annualized rate of 0.9% over the five years to 2026, reaching 11.21 cents per kilowatt-hour. Demand for natural gas from developing countries and a growing domestic economy, as well as a possible return of demand for coal due to the higher LP prices,[11] will keep input costs high. Additionally, the Covid-19 pandemic has shifted electricity load away from commercial and industrial consumers and toward residential consumers. Though the long term effects of this remain to be seen, if the phenomenon persists, electricity prices will be more influenced by residential consumption habits. In the short term, IBIS*World* expects this to be more or less a wash, although slightly detrimental due to reduced overall demand. The economic recovery, however, is expected to mitigate reduced demand.[12, 13]

Electric Power Consumption

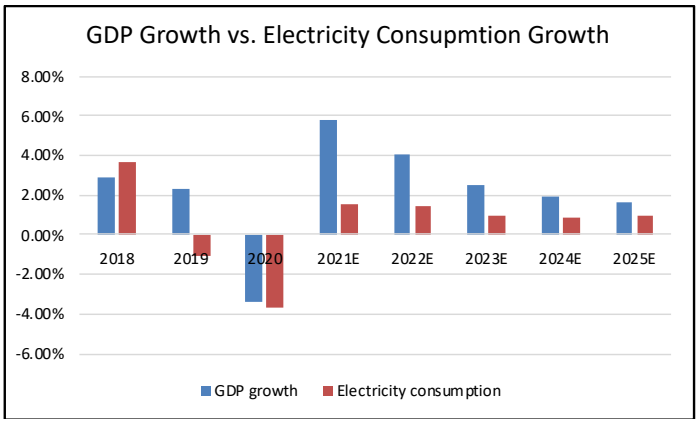
Pre-pandemic electric power consumption estimates were projected to increase by 0.6% per year, reaching 39.0 quadrillion Btu by 2024. The pandemic slowed this growth for 2020 and shifted some of the usage from commercial to residential, as well as reducing industry usage outright. Consumption, however, is expected to keep pace with economic growth as the world economy recovers from the pandemic recession. With a CAGR of -0.3%, electricity consumption was essentially flat in the five years leading up to 2019. Increased energy efficiency led to a decrease in per capita energy consumption, which when coupled with meager population and price growth led to sluggish revenue growth opportunities. Electricity generated from natural gas (30.6%), coal (28.6%), nuclear (22.7%), and renewables (17.4%) make up nearly all (99.3%) of the electricity consumed in the US for 2019. IBIS*World* has slightly higher growth prospects at 0.75% CAGR to the year 2027, but both growth rates are modest at best for consumption outlook in the near future. Like Freedonia, IBIS*World* highlights a recovering economy from the pandemic downturn, but they also see mitigation from manufacturing moving abroad and households continuing to seek energy efficiency.[14, 15]

GDP Growth and Electricity Consumption

Historically, GDP growth and electricity consumption have been linked, however, that link appears to break as countries become more developed. Increased electrification, shifting from a low-skilled manufacturing economy to higher-skilled manufacturing and a service-based economy, and relative income levels all play a role



in this phenomenon. For the first time in a decade, GDP contracted in the US in 2020, due to the economic cutbacks of the pandemic. Prior to this 3.4% drop, the five years leading up to the pandemic saw an average of 2.4% growth per year. GDP has bounced back in 2021, with growth expected to be just under six percent at 5.8%, the highest growth the US economy has seen since the mid-80s. The economy is projected to grow at an average of just over 2% for most of the remainder of our forecast horizon.[16, 17, 18]



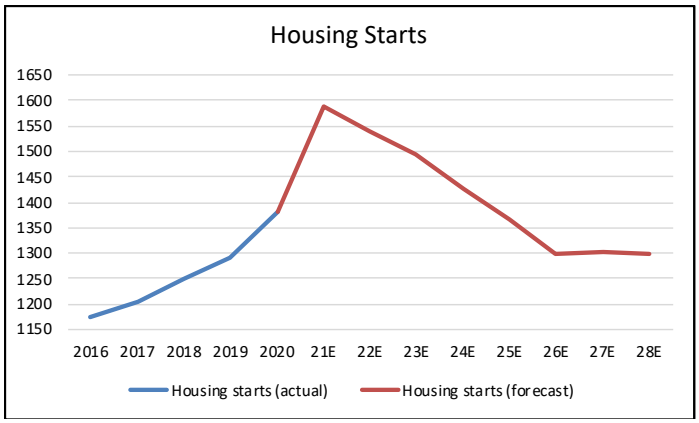
Source: IBIS*World* – US GDP, Electric power consumption

Electric Power Transmission

Overall, the outlook appears to be brighter in the coming five years than the previous five for electricity transmission business, with IBIS*World* projecting revenue to increase at an annualized rate of 1.1% to $434.7 billion in 2026 compared to a declining annualized rate of 0.8% for $411.4 billion in 2019. As mentioned above, reduced consumption played a big role in the decline over the past five years, but the improved consumption horizon, as well as the anticipated higher price for electricity, should help realize the anticipated gains.[19]

Housing Starts

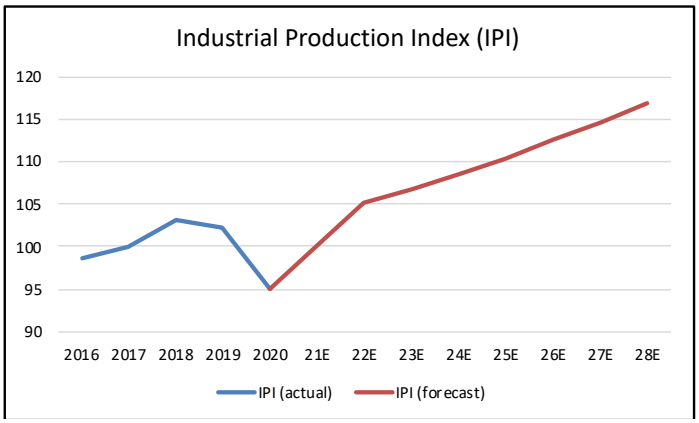
With steady per capita disposable income, low new-home inventories, and a favorable borrowing environment in the years preceding the pandemic, housing starts saw modest growth in the five years leading to 2020, annualized at 3.2%. Though the pandemic might have been expected to reduce new housing starts, 2020 saw 6% growth over 2019 and 2021 is expected to see at least twice that with projections in the mid-teens. Five-year annualized growth after that is expected to decline at 3.2%, however, as borrowing conditions are expected to restrain demand. The overall outlook for the forecast period is positive and should help create heightened demand for electricity and boost industry revenue.[20]



Source: IBIS*World* – Housing starts

Industrial Production Index

The industrial production index (IPI) measures output from varying sectors of the economy, including mining, manufacturing, and electric and gas industries. It is a performance metric driven by changes in productivity, credit access, and downstream demand in both domestic and international markets. The index is seen as a measure of total business activity and overall economic health. The IPI has had a clunky growth pattern over the historic period, ranging from a decline of 2.2% in 2016 to an increase of 3.2% in 2018, but has historically seen sustained growth after recessions, as seen after the dot com downturn (2002-07 all had positive growth) and the Great Recession (2010-14 saw increased). For this reason, analysts forecast the IPI to see sustained growth over the next handful of years, with an annual growth rate of 2.1% from 2021 to 2025. This will be dependent on the broad economic recovery from the pandemic, however, but like new housing starts, if the index rises, demand for electricity should increase and revenues for the utilities sector will grow too.[21]



Source: IBIS*World* – Industrial production index

Inflation and Interest Rates

With the US seeing its highest inflation in 30 years, there are fears that the Federal Reserve may raise the federal funds rate, which would in turn raise borrowing costs. Prior to the pandemic, interest rates had been kept at historically low levels to boost economic growth after the Great Recession. Starting in 2016, the rate began to increase as the Federal Reserve sought to return to normal monetary policy. The pandemic, however, has brought the rate back down to inject liquidity into the economy, again lowering interest rates with a target rate of 0.10% early in the recovery and 0.25% today. If inflation continues to be a problem as the economy recovers, the Federal Reserve may need to choose between keeping rates low to massage growth and high inflation.[22]

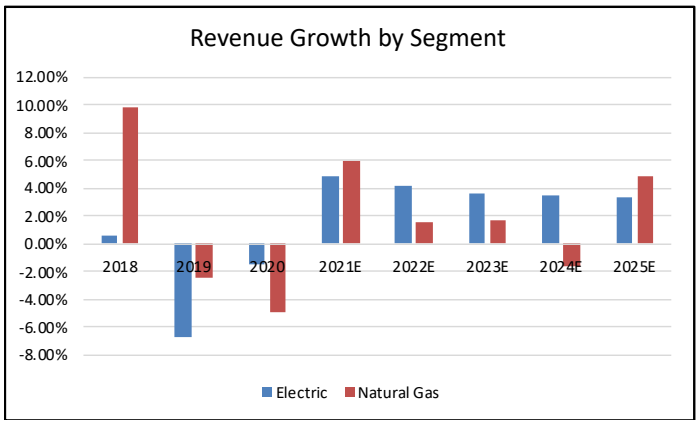
VALUATION

Revenue Assumptions

Our revenue projections follow Bloomberg's forecasts for Ameren's electric and natural gas segments over the next five years, adding the two segments to acquire the total revenue for each projected year. We compared these to FactSet's forecasted revenue for the first three years in the forecasted period, preferring Bloomberg's because they are more conservative. Both Bloomberg and FactSet projections, however, have significantly more growth than the historic period's growth would justify. We accpet this for a couple of reasons: 1) Ameren gives capital expenditure guidance totaling $16.4 to $17.8 billion over the forecast horizon, which is aggressive compared to the historic period and should add capacity and increase

revenue generating operations; and, 2) commodity prices effecting electricity pricing are expected to increase, resulting in price inflation that will inflate revenue. Additionally, through the first three quarters of the year, AEE is on pace to exceed our revenue projections for 2021 by around $100 million. This gives us more confidence in our forecast.

Our forecast period begins with nearly 5% revenue growth for 2021, then levels off for the remainder of the period between 2.8% and 3.8%. The revenue growth rate from electricity sales starts at 4.8% then tapers down to 3.3% at the end of the forecast period, where natural gas revenues show more variance starting at 6% then going negative in the fourth year to -1.6% before coming back up again to nearly 5% in the fifth year. Gas prices are typically more volatile than electricity prices, so this is not surprising.

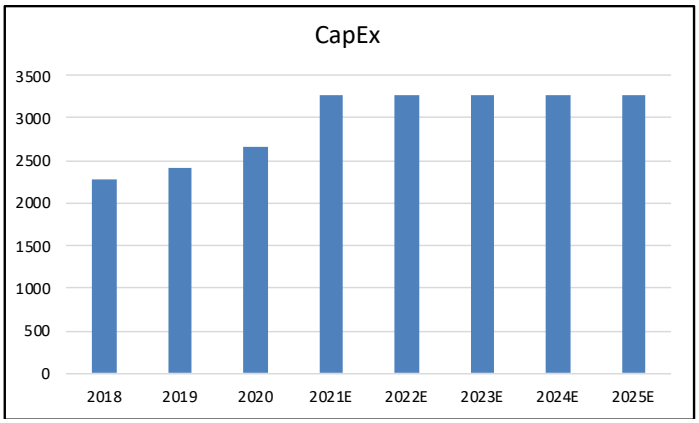


Source: 2020 AEE 10-K Report, HF Model

Operating Cost and CapEx Assumptions

As discussed above in the first section of this report, our operating margin for the forecast period is slightly higher than the average over the historic period. We attribute much of this to cost saving techniques introduced during the pandemic and the tailwinds of a recovering economy. For the first three quarters of the year, our operating margin tracks with current performance, as in that time AEE has seen a 26.1% operating margin and is forecasted by FactSet to come in around 24.4% for the year. This is precisely where our operating margin sits for 2021, but the question to remain is whether AEE can maintain that for the years ahead. Our model assumes so.

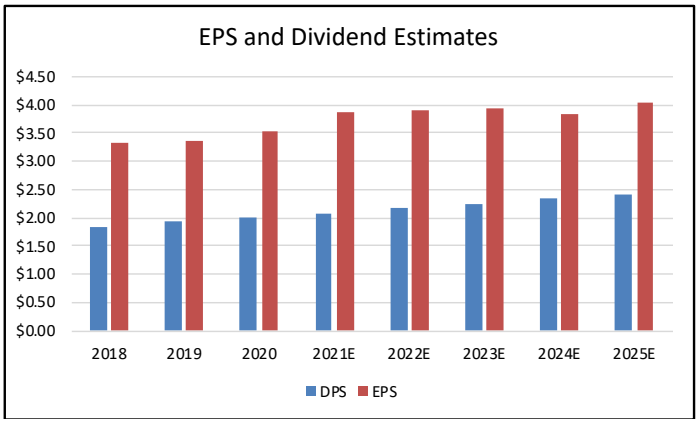
As mentioned above, management forecasts capital expenditures over the forecast period to be between $16.4 and $17.8 billion over the five years. This computes to between $3.3 and $3.6 billion per annum, which we chose the lower number to input into our model. To boost confidence in accepting their forecasts, we compared previous forecasts in 10-K reports to actual expenditures over the historic period and found that forecasts generally tracked well with actual dollars spent.



Source: 2020 AEE 10-K Report, HF Model

Margins and Profitability

Again, with an inflated operating margin for the forecasted period versus the historic period, our profit margin also comes in higher than history might justify. But also, compared to current year performance, we are right on track. Where through the first three quarters of the year AEE has generated 17.8% profits and is expected to record 15.8% for the year (FactSet), we have them averaging 15.9% for the forecast period, with a high in 2021 of 16.1%. These numbers are well within realistic expectations.

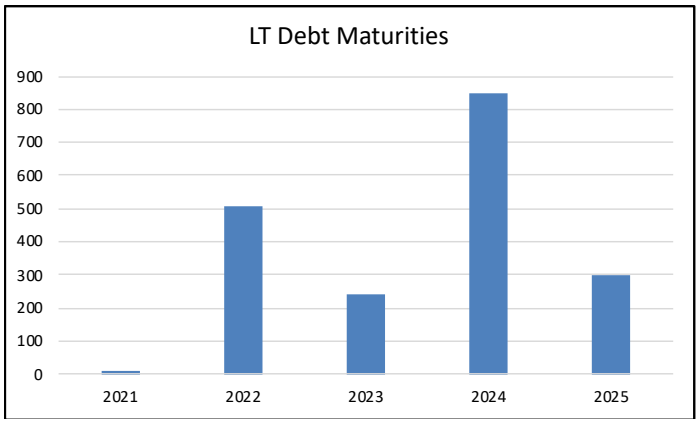


Source: 2020 AEE 10-K Report, HF Model

Debt and WACC

We calculated pre-tax cost of debt to be 2.71% by averaging the yields of AEE longest maturing bonds from three of its business segments: Ameren Illinois, Union Electric Company (Ameren Missouri), and Ameren Corporation. After tax, our cost of debt came in at 2.14%,

which we then entered into our WACC formula, along with a beta of 0.49 calculated from averaging 5-year and 10-



Source: 2020 AEE 10-K Report

year monthly and quarterly betas, a Henry Fund consensus risk premium of 4.9%, and a 20-year Treasury bond rate of 1.99%. This computed to a 3.61% weighted-average cost of capital. Though AEE enjoys an investment grade credit rating, it is toward the lower end of the investment grade scale and has a debt to equity ratio of 1.27. It's long-term maturities to EBITDA compares well to its peers, with the second lowest at 4.74, coming just behind NRG with 4.69 LTM to EBITDA.

	S&P	Moody's	LTM/EBITDA
AEE	BBB	Baa1	4.74x
NRG	BB+	Ba2	4.69x
EIX	BBB-	Baa3	5.28x
D	A	Baa1	5.28x
AEP	A-	Baa2	5.72x
LNT	A-	Baa1	5.29x

Source: FactSet, finra.com

Model Comparisons and Summary

Both our discounted cash flow and economic profit models, as well as our dividend discount model, provide substantial upside, with the first two outputting a price of $127 and the latter at $121. This is a 49% and 42% upside respectively. As such, we recommend a buy for Ameren, seeing their strong revenue performance, substantial capital expenditures, and increasing operating and profit margins as positive signs that bode well for Ameren's near term performance. With one of the higher price-to-earnings ratios among its competitors already, our relative price-to-earning model did not yield any upside. We are fine with this as we prefer to rely on the more fundamental analysis the DCF, EP, and DD models provide.

KEYS TO MONITOR

The following are key indicators to follow to gauge AEE's performance over the next six to twelve months:

- **Economic Indicators**: AEE has a long list of economic indicators that could drive the performance of the stock. Close attention should be paid to all highlighted in this report, but perhaps of most note are prices, interest rates, and GDP growth, although recently the latter has proved less connected to consumption. Higher input prices and retail and wholesale prices for electricity will drive both costs and revenue, but AEE's improving margins should help them take the most advantage of those higher prices. If inflation causes interest rates to rise sharply, AEE may have trouble raising the capital needed for big projects they have in the pipeline. This would dampen the stock's prospects.
- **Margins and Capital Expenditures**: Already hinted at, both margins and capital expenditures will be important measures of AEE's continued value. If AEE can carry through some of the gains in operating and profit margins it has seen at the beginning of the recovery, they will secure a stronger financial position that will help them fulfill their overall business growth and renewable energy growth goals.
- **Regulation and Infrastructure Investments**: Though not focused on greatly in this report, regulatory incentives to invest in renewables, as well as investments in green technologies with the infrastructure bill, could be good news for AEE. As the company seeks to increase their renewable generation portfolio, they could take benefit from tax credits and infrastructure spending that could help their bottom line.

REFERENCES

1. 2020 AEE 10-K Report
2. AEE – Yahoo Finance
3. Sustainalytics.com – Company Profiles
4. 2021 Q3 Earnings News Release
5. *Renewable Energy: United States*, The Freedonia Group. December 2019.
6. Kush Patel, *Utilities in the US*, IBIS*World* Industry Report. May 2021.

7. "Renewable Electricity Production Tax Credit Information," Environment Protection Agency.
8. "Guide to the Federal Investment Tax Credit," US Department of Energy.
9. FactSet – Company Profiles
10. Macrotrends.net – Company Profiles
11. Yahoo Finance – Company Profiles
12. *Price of electric power*, IBIS*World* Business Environment Report. February 2021.
13. *Price of natural gas*, IBIS*World* Business Environment Report. September 2021.
14. *Energy: United States*, The Freedonia Group. January 2020.
15. *Electric power consumption*, IBIS*World* Business Environment Report. August 2021.
16. "U.S. economy and electricity demand growth are linked, but relationship is changing," *Today in Energy*. Energy Information Administration (EIA). March 22, 2013.
17. "Link between growth in economic activity and electricity use is changing around the world," *Today in Energy*. Energy Information Administration (EIA). November 20, 2017.
18. *Gross domestic product*, IBIS*World* Business Environment Report. September 2021.
19. Thomas Crompton. *Electric Power Transmission*, IBIS*World* Industry Report. April 2021.
20. *Housing starts*, IBIS*World* Business Environment Report. September 2021.
21. *Industrial production index*, IBIS*World* Business Environment Report. September 2021.
22. *Macroeconomy: United States*, The Freedonia Group. October 2020.

DISCLAIMER

Henry Fund reports are created by graduate students in the Applied Securities Management program at the University of Iowa's Tippie College of Business. These reports provide potential employers and other interested parties an example of the analytical skills, investment knowledge, and communication abilities of our students. Henry Fund analysts are not registered investment advisors, brokers or licensed financial professionals. The investment opinion contained in this report does not represent an offer or solicitation to buy or sell any of the aforementioned securities. Unless otherwise noted, facts and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Henry Fund may hold an investment position in the companies mentioned in this report.