Electric Utilities Industry
Utilities Sector

**Investment Thesis**
We recommend a market weighting for the Electric Utilities industry over the next year. Record-setting capital spending in 2022 and 2023 on efficiency, resiliency, and renewables provides opportunity for rate increases and tax incentives. These investment opportunities are overcome by rising interest rates, slowing power demand, and regulatory lag. These headwinds have placed pressure on margins as authorized ROE remains flat.

**Tailwinds**
- Electric utilities capex is expected to grow by 14.2% in 2022 followed by 4.3% growth in 2023. Growing capex creates a stronger utility rate base, making rate increases from regulators more probable.\(^4\)
- Increases in wind, solar, and bio-mass energy production support growth in renewable energy production capacity of 27.5% by 2025.\(^2\)
- The revenue required to build and operate renewable energy centers continues to undercut coal and natural gas costs by roughly 49.3%. Costs per unit of electricity generated from renewables is significantly lower.\(^9\)

**Headwinds**
- The U.S. Energy Information Administration forecasts that power sales will see record highs in 2022 with growth of 3.4%; however, this sales growth is expected to decline across all sectors to 0.8% in 2023.\(^6\)
- Over the past decade, electric utility dividend yields have averaged a percentage-point premium to the 10-year treasury yield. With rising interest rates on government bonds and stagnant dividend yields on utility stocks, this places downside pressure on stock prices.\(^8\)
- Failure to pass inflated input prices to customers will slow growth of the electric utilities industry. Increases in electric power prices of 7.5% have been outpaced by inflation in 2022 as regulators delay increases.\(^4\)

**Key Industry Statistics**

<table>
<thead>
<tr>
<th>Market Cap</th>
<th>$ Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy, Inc.</td>
<td>$168.4</td>
</tr>
<tr>
<td>Duke Energy Corporation</td>
<td>$81.7</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>$45.9</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>$23.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P/E (NTM)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy, Inc.</td>
<td>30.2</td>
</tr>
<tr>
<td>Duke Energy Corporation</td>
<td>19.6</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>17.0</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>14.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EV/EBITDA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy, Inc.</td>
<td>16.1</td>
</tr>
<tr>
<td>Duke Energy Corporation</td>
<td>14.0</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>12.8</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>14.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Margin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy, Inc.</td>
<td>16.8%</td>
</tr>
<tr>
<td>Duke Energy Corporation</td>
<td>15.5%</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>%</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

**12 Month Performance**

**Industry Description**
The electric utilities industry generates, transmits, and distributes electricity from power generators to distribution centers for consumers in a highly regulated market. The electric utilities industry serves residential, commercial, industrial customers. The industry is dominated by a handful of large companies that produce and supply power to regions across the United States. Companies investing in the clean energy transition are well-positioned to outperform players reliant on fossil fuel.

---

Important disclosures appear on the last page of this report.
Firms in the electric utilities industry engage in electric power generation and transmission. The generation and transmission of electricity requires extensive infrastructure; hence, barriers to entry are high and concentration is very low.

The chart above shows the 20-year performance of the S&P 500 and the S&P 500 Utilities Sector. The Utilities sector has remained stable against the S&P 500. The Utilities Sector has followed the performance of the S&P 500 very closely, but the industry has shown more resistance in times of economic prosperity and downfall. After COVID-19, the entire S&P 500 prospered due to low rates, but the utilities sector continued to grow at a much lower rate. Generally, utility stocks have low betas because of they tend to be less volatile than the market.

Historically, the utilities sector has demonstrated recession-resistance for a multitude of reasons:

- Constant demand for utilities services
- Predictable cash flows
- Stable dividend yields

These factors make the electric utilities sector a defensive play in times of economic downturn, but rising interest rates creates headwinds for the capital-intensive industry.

The chart below shows the returns of the S&P 500 and the S&P 500 Utilities indices from the start of 2019. Regulatory authorities set an authorized ROE on utility companies around 10.0%; hence, electric utility companies fail to capture the returns of growth companies during periods of economic growth and recovery. Electric utilities have shown slow yet stable growth in contrast to the index.

Energy Sources

In 2019, coal-fired electricity generation fell to a 42-year low. After scrutiny, litigation, and emphasis on clean energy, once-dominant coal-fired electricity generation has been replaced by more efficient methods.

The chart above shows the main sources of electricity generation from 1950 to 2021. The chart shows a shift from coal usage from its peak in the late 2000s. The electric utilities industry now relies on natural gas, but government and firm initiatives aimed at reducing emissions have spurred the use of clean, renewable sources in power generation.

The Henry Fund’s current holdings, NextEra Energy and Ameren Corporation differ significantly in terms of electric power generation. NextEra Energy, Inc. (NEE) generates roughly 50,000 megawatt hours of electric power primarily through natural gas, nuclear, and renewable sources. For NEE, coal contributes only 1.0% to their generation capacity. On the other hand, Ameren’s (AEE) operations are deeply rooted in coal-fired power plants located in the...
Midwest. AEE relies on coal to generate 73.0% of their power supply. Through renewables, NEE has been able to generate a higher gross margin over the past five years at 35.7%, compared to the industry average of 25.5%.

### Industry Segments

The chart above shows the residential sector accounting for the largest consumption of electricity in the U.S. in 2021. Housing metrics in the electric utilities industry are important factors in gauging the future performance of the electric utilities.

Together, the commercial and industrial sector make up more than half of the electricity consumption. The use of industrial and production metrics to gauge the future performance of electric utilities have proven to provide valuable insight on the future performance of utilities.

The transportation sector represents roughly 0.15% of electricity consumption which presents an opportunity for growth in overall consumption. In 2020, the transportation industry accounted for about 27% of total greenhouse gas emissions. Historically, the transportation industry has relied heavily on fossil fuels; however, the energy transition has encouraged production of electric vehicles that reduce carbon emissions. For 2022, Bloomberg New Energy Finance estimates that electric buses will account for 44% of total buses sold and produced. As the transportation industry begins to adopt electric methods of transportation, consumption will increase significantly in this sector.

Further electrification across many other sectors will continue to drive the demand for power upwards in the long-term. As sectors focus on reaching net-zero emission goals by 2050 or earlier, electric power usage will become increasingly dominant among petroleum, coal, and other fossil fuels across all sectors.

### Costs of Power Generation

The chart above shows the levelized cost of electricity (LCOE) which represents the average revenue per unit of electricity generated that would be required to recover the costs to build and support a generation plant. LCOE includes capital, operations, maintenance, variable, and transmission costs. Integration of cleaner energy remains attractive for large corporations as the capital costs remain low in comparison to coal-fire and nuclear energy plants. Although initial costs of power generation using fossil fuels remains expensive, the marginal costs of producing electricity are low for conventional methods.

With inflation and supply chain complications, the costs associated with building wind farms and solar generation farms has risen by roughly 8%. Firms investing in renewable power generation are now facing inflationary hurdles to reach generation levels that are sufficient to fulfill power demand and reduce their reliance on natural gas. This has delayed the clean energy transition as firms now battle rising interest rates.

The chart below removes the capital cost of production through different electric generation methods. With tax credits, clean electricity production remains very competitive with conventional methods of electricity production.
Inflation and Power Prices

A mix of inflation and regulation has limited electric utility companies from passing on cost increases. The chart below shows that inflation has outpaced the increase in power prices that electric utility companies have been able to pass to customers. Inflation in combination with rampant increases in the prices of natural gas has created a difficult operating environment for electric utilities companies.

2023 provides a positive outlook as inflation cools and the growth in the price of power overcomes inflation. Firms with expansive renewable energy capacity are best positioned to endure the inflationary environment because of the higher margins associated with the renewable power generation.

**INDUSTRY PROJECTIONS**

Revenue Growth and Price of Electric Power

Tax credits for coal, combined cycle (natural gas), do not exist due to the emissions associated with generation. Tax credits for nuclear power generation still exist because nuclear power generation is still a relatively clean process, yet many firms have shifted from nuclear due to safety concerns and environmental impacts from nuclear waste.
The chart above highlights an average increase in revenue across the industry of 7.42% due to an increase in the price of electric power. In 2021, the industry experienced only a 2.1% increase in unit sales of electricity. This illustrates the industry’s ability to pass costs through to customers.

For 20 to 30 years, the electric utilities industry has benefitted from an environment of falling costs, but the rising price of input costs has allowed these regulated companies grow revenue without passing dramatic increases to consumers or increasing sales volume.

**Revenue Growth and Natural Gas Prices**

Looking at revenue growth versus natural gas prices tells another story. Falling production costs over the past 20 to 30 years has given the industry a cushion but the rising prices of natural gas, a main factor in electric power generation, has prompted difficult conversations with regulatory authorities.

Slightly heightened margins that the electric utilities industry has experienced in past decades will be diminished by elevated input prices. The price of natural gas grew by 91% and 82% in 2021 and 2022 respectively. Although the price is expected to decrease into 2023 and 2024, this will send ripple effects on performance across many sectors. For natural gas producers and exporters, these price increases have been beneficial as the S&P 500 Energy Index has increased 30% YTD.

Looking into the future, revenue growth of electric utility companies will slow as the industry adjusts to historically elevated input prices. Electric utility companies will also look to shift further towards renewable power generation to avoid surging natural gas prices, but investment in renewable energy is currently constrained by high interest rates.

**EPS Growth**

FactSet provides an aggregate of all historical and estimated EPS figures for companies in the electric utilities industry.

In 2021, EPS figures dropped reflecting large infrastructure investments and increases in power generation costs. Gross margins of companies with planned renewable energy investment were negatively impacted by the termination of some federal tax incentives at the end of 2022. Despite rampant increases in earnings per share in 2022, EPS growth is expected to drop in 2023 as interest rates and input costs continue to erode net margins by 1.2% in 2022.

**Dividend Growth and Yield**

Dividend yields dropped in 2021 as rates remained low, however, yield is expected to raise an average of 3.56%. This creates a proposition for investors seeking recession-resistant dividend yield. As of September 21, 2022, the
average dividend yield on utility stocks came in at 3.2% \(^8\). Compared to the 10-year Treasury Yield of 3.697, investors will look to put money into low-risk government bonds.

Over the past decade, utility dividend yields have averaged a percentage-point premium to 10-year treasury yield, keeping the industry attractive to investors looking for stable yield \(^8\). With yield on utility stocks remaining stagnant, utilities companies look expensive in terms of bond yields.

With utility companies looking to raise dividends in the near-term, this places downward pressure on prices. As these firms retain less of their earnings, this inhibits their ability to invest in clean energy projects.

**Capital Expenditures Growth**

![Annual CapEx Growth](chart)

*Source: FactSet*

With higher interest rates in the near-term, the industry faces an uncertain environment moving forward. As firms make progress towards net-zero emissions, growth in clean energy capacity is hampered by a higher cost of debt. Reducing carbon emissions requires increased capital expenditures toward efficient infrastructure, lower-emission power sources, and integration of technologies that capture carbon. In an environment of rising interest rates, this will prove to be difficult to accomplish.

Without the help of regulators increasing rates and authorized ROE, the electric utilities industry will struggle to maintain net margins.

**Renewables**

In 2021, U.S. renewable energy consumption was 11.73 quadrillion British thermal units, accounting for 12% of the United States’ total energy consumption (EIA). The main renewable energy sources are wind, hydroelectric, solar, biofuels, biomass waste, wood, and geothermal. Renewable energy consumption within the next 5 years as consumption is projected to increase by 27%, with a 2.1% CAGR over the next 30 years \(^4\).

Looking historically, the U.S. has already experienced a dramatic shift towards renewables as renewable energy consumption has grown 42% from 2010 to 2020 and 90% from 2000 to 2020 \(^4\). The U.S. continues to be a hub for renewable energy innovation and integration.

Increased consumption of renewable energy is supported by the prominence of solar and wind energy. The chart below depicts a CAGR of 5.91% and 7.27% for solar and wind energy production capacity respectively.

![Renewable Energy Capacity in the U.S.](chart)

*Source: Statista*
Above, the chart depicts a drop in solar capacity in 2021, which is offset by additional wind capacity. Roughly 80% of the United States’ solar components come from Asia. With supply chain constraints, logistics challenges, and trade headwinds, the growth in solar generation capacity dropped.

Currently, the two largest sources of renewable energy are solar and wind. The government has provided federal incentives for power produced through renewables. With continuous innovation and government support, solar and wind alternatives have increased potential to replace costly fossil fuel power generation.

Decarbonization

Decarbonization aims to reduce the greenhouse emissions produced using fossil fuels. Many of the big players in the electric utilities industry have adopted strategies to achieve net-zero emissions by 2050. Net-zero means reducing carbon emissions and acquiring traditional offsets or renewable energy credits. Some firms such as NextEra Energy have set ambitious carbon reduction goals, committing to eliminate carbon emissions from operations no later than 2045 without offsets.

Decarbonization of the U.S. economy will require billions of dollars of investment. Electric utilities companies that are not focused on decarbonization efforts may risk losing the support of regulators and investors. Investing in upgraded transmission lines and the clean energy transition entails immense capital investment, but the industry needs to evolve towards clean power generation to support greater electrification of other industries with aggressive net-zero emissions goals.

Although the capital costs of power generation through renewable sources is cheaper than conventional methods, the initial costs of building wind and solar farms hinders the short-term performance of the electric utilities.

Firms with significant renewable energy capacity, such as NextEra Energy, will stand to benefit from other firms setting net-zero emissions. From producing power with renewable energy, NextEra Energy receives renewable energy certificates which can be traded and sold along with the generation of a power plant. Net-zero emissions standards are creating a strong market demand for offsets, and companies producing renewable energy can benefit from the sale of these instruments.

Regulation

The electric utilities industry is characterized by “natural monopolies due to the high barriers to entry and few large companies within the industry. The industry’s performance is reliant on commodity prices, prominently natural gas. The industry is subject to significant regulatory oversight to ensure proper utility services at fair rates.

Government regulation impacts the performance and outlook for the electric utilities industry. The Federal Energy Regulatory Commission regulates transmission, distribution, and sales of natural gas and electricity. This ensures reliability and fairness to consumers. On a state level, regulators have extensive oversight on pricing and access to infrastructure.

Federal and State Clean Energy Initiatives

Federally, renewable energy incentives have been scaled down. This is not consistent with achieving net-zero emissions by 2050; however, many other initiatives aim to incentivize renewable energy production. Renewable Electricity Production Tax Credits (PTCs) were a federal tax incentive provided for the generation on qualified renewable energy resources. This incentive has only been extended to the end of 2022, but the tax credit has been scaled back for wind farms by nearly 40%.

Renewable portfolio standards (RPS) require that a percentage of electric power sales in a state comes from renewable energy sources. Companies that are unable to fulfill these standards purchase and trade renewable energy certificates (RECs) to comply. These certificates enable a corporation to supply energy without directly obtaining the energy from a renewable source.
Electric Power Consumption

As households composed 45% of electricity consumption in 2021, demand is primarily driven by household usage. During an economic downturn, households look to cut back on energy usage. This is depicted in 2020 as energy usage dropped by 2.48% due to the negative impacts of the pandemic. Industrial and commercial usage was also cut back due to production plant closures across the U.S. During economic recovery, power consumption typically grows which is highlighted in 2021. The Energy Information Administration estimates that 2022 power consumption will reach record highs in 2022.

As consumers and corporations endure an inflationary environment, the market is likely to cut back on energy consumption, as 2023 shows a much milder decrease. This is primarily due to households adjusting to elevated electric power prices.

Beyond 2023, power consumption is projected to stabilize as the price of natural gas and electricity decline. Stable power consumption coupled with declining input prices signal that the once out-performing industry will normalize over the course of the next few years.

Power sales also depend heavily on industrial and commercial activity. If the United States falls into a recessionary environment, electric power consumption could fall as far as 100 basis points.

Price of Electric Power

Performance within the utilities industry in 2022 is mainly attributed to the elevated prices that utilities companies can charge. Industry revenue moves with the price of electric power; hence, a projected stabilization in the price of power implies that the industry will not be experiencing high growth levels that it experienced in 2021 and 2022.

Natural Gas Prices Stabilize

Natural gas was the largest source for energy generation in 2021 as it was used to generate 37% of total electric power output. Utility companies that use natural gas to generate electric power experienced above-average returns that out-performed the market.

With natural gas prices reaching highs and companies facing pressure to shift from fossil fuels, natural gas usage in production is expected to shift from 37% to 36% by 2023. Natural gas usage in electric production is becoming less attractive as prices continue to climb and efficient alternatives become available.
Housing Starts and Mortgage Rates

Housing starts shape the outlook of electric utility performance moving forward. As the residential segment accounts for the largest share of electricity consumption, housing starts directly correlate to the demand for electricity. From 2020 to 2021, the growth in housing starts was spurred by attractive interest rates and housing demand. In 2022 alone, the 30-year fixed mortgage rate has risen by 1.77% to 5.22%. A decrease in housing starts and power consumption signals that the performance of the electric utilities industry will decline throughout the next 5 years.

Source: IBIS World

In the greater picture, 5.22% fixed mortgage rates are still very low, but relative to pandemic-level rates of 2.68%, mortgages have become much less attractive.

Industrial Production Index

The industrial production index measures real output in the manufacturing, mining, electric, and gas industries. Industrial activity contributes to the overall demand for electricity. Although the index remains strong through 2023, the industrial segment accounts for a much smaller segment than residential.

MARKETS AND COMPETITION

Big Players

The chart above shows the dramatic decrease in housing starts as the 30-year fixed mortgage rate approached 7%. As of September 21, 2022, there is a 70% chance that the federal funds rate will reach 4.25% by the end of 2022. 30-year mortgage rates move in synchrony with the federal funds rate. Moving forward, increasing fixed mortgage rates will further discourage housing starts in the short term.

Source: FactSet

The chart above shows some of the largest electric utility companies in the S&P 500. Most of these firms also engage in the distribution of natural gas. These large electric utility providers have maintained this position in the market for...
many years prior due to the characteristics of electric utilities companies:

- Low concentration and competition
- High barriers to entry
- Capital intensity
- Low revenue volatility

**Industry Metrics**

**Power Mix**

![2021 Generation by Fuel Type](image)

Source: FactSet

The electric utilities industry is dominated by natural gas and coal, but the clean energy transition has spurred investment in solar, renewables, and hydroelectric power generation. As alternative forms of power generation become more prominent and efficient, firms retire their nuclear, coal, and natural gas power centers.

Firms that have led the clean energy transition are best positioned to outperform moving forward because of tax incentives and lower marginal costs per unit of electricity generated through renewables. Firms with deep roots in coal, natural gas, and nuclear power facilities will lag behind as they incur costs related to emissions, plant retirement, and higher costs of debt.

**Company Metrics**

**Size Metrics**

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Cap ($B)</th>
<th>Revenue ($M)</th>
<th>Gross Profit ($M)</th>
<th>Net Income ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy</td>
<td>164.76</td>
<td>21,267</td>
<td>8,863</td>
<td>3,573</td>
</tr>
<tr>
<td>Southern Company</td>
<td>74.80</td>
<td>25,097</td>
<td>7,105</td>
<td>3,901</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>71.73</td>
<td>23,230</td>
<td>6,560</td>
<td>2,408</td>
</tr>
<tr>
<td>Dominion</td>
<td>49.06</td>
<td>13,964</td>
<td>7,966</td>
<td>2,647</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>45.85</td>
<td>16,624</td>
<td>4,670</td>
<td>2,488</td>
</tr>
<tr>
<td>Exelon Corporation</td>
<td>38.00</td>
<td>39,267</td>
<td>8,342</td>
<td>1,706</td>
</tr>
<tr>
<td>Xcel Energy</td>
<td>36.88</td>
<td>13,368</td>
<td>2,792</td>
<td>1,597</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>21.57</td>
<td>6,394</td>
<td>1,845</td>
<td>990</td>
</tr>
</tbody>
</table>

Source: FactSet

The largest electric utility company, NextEra Energy, is a leader in renewable energy. With 32% of their generation capacity coming from wind and solar energy, NEE is well-positioned to outperform due to their immense capital expenditures in renewables. NEE continues to invest in transmission, reliability, and renewables with over $15.7 billion in planned capital expenditures.

Ameren, a current Henry Fund holding, is a smaller electric utility company with operations in Missouri and Illinois. 73% of their energy supply comes from coal with only 8.1% renewable energy production capacity. Ameren is not well positioned to grow in the long-term as their energy supply from coal has grown 9.6% in the past year, but the company has demonstrated stable growth even in recessionary periods.

**Margin Analysis**

<table>
<thead>
<tr>
<th>Company</th>
<th>Gross Margin (%)</th>
<th>EBIT Margin (%)</th>
<th>Net Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy</td>
<td>42%</td>
<td>33%</td>
<td>17%</td>
</tr>
<tr>
<td>Southern Company</td>
<td>28%</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>28%</td>
<td>23%</td>
<td>10%</td>
</tr>
<tr>
<td>Dominion</td>
<td>57%</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>28%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Exelon Corporation</td>
<td>21%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Xcel Energy</td>
<td>21%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>29%</td>
<td>21%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: FactSet

Companies with wind, solar, and well-established nuclear facilities experience higher gross margins due to the unit cost of generation being much lower. Moving forward, companies with established renewable generation facilities will be more resistant to regulatory lag, high interest rates, and inflation as renewable generation provides a cushion for margins.

On the other hand, firms that rely on natural gas and coal-fired power generation will battle elevated input costs in the near-term.

**Capital Structure**

<table>
<thead>
<tr>
<th>Company</th>
<th>D/E</th>
<th>Debt Rating (Moody’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy</td>
<td>1.17</td>
<td>Baa1</td>
</tr>
<tr>
<td>Southern Company</td>
<td>1.42</td>
<td>A3</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>1.32</td>
<td>A2</td>
</tr>
<tr>
<td>Dominion</td>
<td>1.62</td>
<td>Baa2</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>1.37</td>
<td>Baa1</td>
</tr>
<tr>
<td>Exelon Corporation</td>
<td>1.45</td>
<td>Baa2</td>
</tr>
<tr>
<td>Xcel Energy</td>
<td>1.42</td>
<td>Baa1</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>1.31</td>
<td>Baa1</td>
</tr>
</tbody>
</table>

Source: FactSet
Electric utility companies are debt-intensive companies with aggressive goals to meet net-zero emissions before 2050. Higher costs of debt will diminish net margins in near-term and detract further capital investment in clean energy. Favorable agreements with regulators will provide relief although regulators have been slow to react to rising rates.

### Payout Policy

<table>
<thead>
<tr>
<th>Company</th>
<th>Dividend Yield</th>
<th>Dividend Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>NextEra Energy</td>
<td>2.05%</td>
<td>93.38%</td>
</tr>
<tr>
<td>Southern Company</td>
<td>4.14%</td>
<td>81.31%</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>4.13%</td>
<td>120.60%</td>
</tr>
<tr>
<td>Dominion</td>
<td>4.53%</td>
<td>66.98%</td>
</tr>
<tr>
<td>American Electric Power</td>
<td>3.72%</td>
<td>66.79%</td>
</tr>
<tr>
<td>Exelon Corporation</td>
<td>3.53%</td>
<td>77.47%</td>
</tr>
<tr>
<td>Xcel Energy</td>
<td>2.89%</td>
<td>65.81%</td>
</tr>
<tr>
<td>Ameren Corporation</td>
<td>2.83%</td>
<td>61.10%</td>
</tr>
</tbody>
</table>

*Source: FactSet*

High dividend yields and payout ratios is very characteristic of utility companies. In the near term, it is expected that most utility companies will continue to raise their dividends per share to compete with attractive bond yields; however, they have remained stagnant and lagged government bond yields. During 2021, dividend growth across the industry was a mere 1.6%¹. When bond yields fell to historic lows, electric utilities companies raised dividends slightly and capitalized on low rates to invest in infrastructure, renewables, and modernization. These companies face a more challenging operating environment moving forward.

### Porter’s 5-Forces

#### Competition - Low

Electric utilities are dominated by a few large companies that service specific regions within the U.S. Competition within regions is very low as companies are granted to be the sole providers in the states that they serve.

#### Bargaining Power of Suppliers – High

Electric utility performance depends heavily on commodity prices as natural gas is a large component of power generation. The bargaining power of suppliers is high, so utilities companies enter contracts that protect them from large swings in the prices of inputs. As companies face pressure to reduce emissions, the power of suppliers will have less influence on the performance of the electric utilities industry. Current reliance on commodities to produce power hinders the industry’s ability to be completely stable in times of volatile commodity prices.

### Barriers to Entry - High

High barriers to entry in the electric utilities industry has provided an economic moat. Immense capital investments in renewables, extensive infrastructure requirements, and exclusive rights and obligations continue to safeguard the industry from new entrants.

#### INVESTMENT POSITIVES

- Demand for power in the U.S. is expected to reach all-time highs in 2022.
- Renewable energy production costs continue to undercut conventional coal-fire and natural gas energy production by roughly 50%².
- The electric utilities industry is safeguarded by capital intensity and obligations to deliver power to consumers and corporations in given regions.
- Expensive conventional power generation is expected to decrease through 2022 and 2023 as electric utility companies adopt wind and solar alternatives.

#### INVESTMENT NEGATIVES

- Stagnant dividend yields on utility stocks and rising government bond yields creates a value proposition for investors seeking stable yield.
- Raising dividends will lower price of electric utility stocks and reduce cash flow.
- Investment in electric utilities will transfer towards low-risk government bonds offering attractive yields.
- Pressure to reduce emissions and invest in clean energy prompts additional capital expenditures to support the clean energy transition.
- Projects aimed at increasing renewable energy production capacity are hindered by rising costs of debt.
- Reliance on natural gas exposes the industry to commodity price risk and fluctuations.
- Passing entire input costs onto customers is inhibited by state energy regulators and regulatory lag.
Federal tax credits that support renewable energy generation and investment have been scaled down placing downward pressure on net margins.

The price of power charged by electric utility companies has been unable to keep up with inflation in 2022.

REFERENCES

1. FactSet
2. Statista
3. Bloomberg
4. IBIS World
5. Investopedia
6. U.S. Energy Information Administration (EIA)
7. Reuters
8. Barron’s
9. Lazard
10. U.S. Environmental Protection Agency
11. Yahoo Finance
12. Deloitte 2022 Power and Utilities Outlook
13. EY 2022 Utilities Outlook
14. S&P Global Market Intelligence
15. Freddie Mac
16. CME Group

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.