From disruptive technologies, including distributed energy and energy storage resources, to a need for significant investments in grid modernization, the Power & Utilities (P&U) landscape is witnessing a rapid transformation. Investor-owned utilities and independent power producers are simultaneously faced with economic and regulatory uncertainties, stagnant demand growth, electricity and gas price declines relative to inflation (the latter owing to the US shale revolution), and shareholder demands for greater value creation. Additionally, the average return on equity authorized in rate cases for electric and gas utilities continues to decline, impacting credit ratings and overall earnings. These converging pressures are amplified further by customer and regulatory demands—such as Renewable Portfolio Standards enacted by states—for green, reliable, and affordable electricity. Given these external and internal forces, mergers & acquisition (M&A) continues to be a very appealing strategic option. As the industry continues to consolidate, identifying and capturing value throughout the M&A life cycle—from strategy, identification of target or divestment opportunities to due diligence and execution—are not only important but imperative.

As strategic and financial investors continue evaluating market opportunities, we believe that three key questions should be considered when embarking on M&A activity:

- How do the sector’s transformation and recent M&A transactions influence my strategic priorities?
- What key capabilities and technologies are critical for the acquirer’s future success?
- How can M&A help unlock additional value to shareholders?
The sector is being reshaped by forces that have been evolving and converging for more than a decade. We believe that three main disruptors are taking a predominant influence in the sector’s inorganic growth activity:

1. **The shale revolution** introducing unprecedented amounts of low-cost natural gas
2. Growing importance of distributed energy resources, primarily renewables and energy storage resources
3. The current and future capital investments required to replace aging infrastructure and modernize through digital technology.

The shale revolution in the United States shifted the economics of the industry and contributed to the overall transformation. The large influx of natural gas pushed Henry Hub down from over $7 per 1 million BTU (British Thermal Units), right when the financial crisis started, to $2.22 most recently in December 2019. Between 2010 and 2018, electricity net generation kilowatt-hours shifted from coal to natural gas (figure 1) and renewables, as discussed further below. Natural gas power plants are prevalent across the country, but are especially dense in the eastern United States and along the West Coast while large parts of the Great Plains still rely heavily on coal.

Furthermore, over the past several years, increasing demand for renewable energy due to regulatory measures, as well as cost reductions in manufacturing related to advancements in technology, have driven down the levelized cost of energy (LCOE) for wind and solar to new lows. LCOE for new-build wind and solar is now competitive with the marginal cost of existing generation. The estimated lowest cost of onshore wind is $29 megawatt hours and utility scale solar PV is $36MWh versus an average of $36MWh for existing coal plants. These shifts in cost competitiveness are contributing to a continued rise in utility scale renewable generation of up to ~10 percent of the total portfolio. Along the same lines, the evolution of the renewables sector has been enabled by the advancements in energy storage. Battery storage has historically been inefficient and cost prohibitive; however, battery prices fell approximately 85 percent from 2010 to 2018. The trend of declining battery prices has recently made battery storage systems economically attractive. These shifting economics create new pockets of value that investors and operators can tap into to address an ongoing need for margin improvement via acquisitions of new resources.
Finally, there is a need for major capital investments to upgrade aging infrastructure, including the deployment of resources to digitally enable a more and more decentralized grid that can reconfigure, island, and reconnect. Modernization is required to manage two-way power flows to optimize distributed energy resources, make the grid more resilient, and reduce outages from national disasters. Total industry capital expenditure was ~$120 billion in 2018, 54 percent higher than 10 years ago, and is expected to grow 13 percent in 2020. Additionally, the estimated cumulative investment gap (unfunded required investment) between 2016 and 2025 for generation and transmission and distribution (T&D) infrastructure is estimated to be ~$177 billion. To cover the required resources, the industry will need strong balance sheets to identify and deploy capital.

The forces driving the P&U transformation have led to a notable shift in M&A activity, as natural gas, renewables, and T&D transactions have increased as explained further below.

While deal volume has remained somewhat consistent since 2009 at 100-120 deals per year, deal value has seen a notable increase (figure 2). The spike in deal value in recent years speaks to the new areas of value created by the market forces discussed earlier.

Figure 2: Deal value ($billion, left axis) and count (#, right axis) by segment

* 2019 figures include announced deals that have not yet closed, as of July 1, 2019.
Between 2014 and 2018 deal value increased by 50 percent relative to 2009–2013. All segments have significantly increased the level of activity by value, except for Electric Utilities. However, transactions in the renewable sector saw an increase in both value and volume of 150 percent and 30 percent, respectively (figure 3).

Figure 3: Proportion of deal value by segment (total = $500 billion)

Consistent with their growth in share of the overall US generation portfolio, recent acquisitions of renewables assets have implied high average enterprise value (EV)/earnings before interest, taxes, depreciation, and amortization (EBITDA) multiple of 17x, followed by Gas Utility deals at 14x. The relatively high value of these transactions can be seen as a market reaction to two of the key market forces discussed earlier (introduction of new energy resources and the shale revolution).

Figure 4: Median transaction value and EBITDA multiples by segment (2016–2018)
Renewables deals tend to have relatively high valuations for a variety of reasons. Primarily, the underlying assets have longer-term power sales agreements with higher-quality off-takers. In addition, they have lower installation costs, which enable meaningful investor returns even as prices for long-term power purchase agreements (PPAs) have come down. Renewable portfolio standards and “green” corporate decisions make these investments attractive, which align with the sector’s need for long-term stable returns. There is also a belief by some investors that power prices will increase and therefore there is an upside at the end of life of an existing PPA that also increases the value of the transaction. These elements have driven up the value of renewable transactions (figure 5).

**Figure 5: Power plant transactions median $/kW by fuel type**

![Bar chart showing median $/kW by fuel type for 2016, 2017, and 2018.](chart)

- **Gas**: 373, 286, 562
- **Wind**: 951, 1,038, 1,475
- **Solar**: 2,025, 1,370
- **Coal**: 466, 112, 289
- **Oil**: 524, 190, 275

The market transformation is not over and with the notable shift in M&A activity in recent years, we expect the space will continue to address the challenges discussed, as well as capture the new pockets of value being created in the industry.
How do the sector’s transformation and recent M&A transactions influence my strategic priorities?

Many P&U executives and investors are addressing some of their challenges and preparing for the changing sector dynamics with M&A. By employing various strategies, industry executives and investors are able to achieve different benefits that well position them to address the industry shifts.

Due to the nature of the P&U industry (including cost of service economics and selected utility commissions’ desire to retain jobs in state), operational synergy-related improvements to regulated utility businesses are generally passed on to customers. As a result the P&U industry is presented with fewer incentives, when compared to other industries, motivating P&U executives to pursue M&A activity to achieve cost synergies. In today’s environment additional motivations vary, but include addressing new industry conditions, technological opportunities, and the regulatory environment.

In our experience, industry participants that engage in strategy-driven M&A are typically focused on four benefits, which stand out from recent M&A activity:

- Geographic diversification
- Business diversification
- Strengthen the balance sheet
- Innovate into new lines of business

While these benefits are by no means all-encompassing, they represent themes present in recent deals which are described below.

Geographic diversification
In order to improve returns and drive long-term growth opportunities to support future investments, many P&U companies have engaged in M&A activity to expand geographically into markets that offer a diversified customer base, market, and regulatory environment.

Emera’s 2015 acquisition of TECO reflects an example of a transaction that led to increased scale and offered geographic and regulatory diversification.¹³ Emera’s focus prior to the acquisition had been to leverage its asset base in Nova Scotia to expand within the Canadian Maritimes and the New England region. TECO represented a significant step-out transaction that introduced Emera south of the US border, reducing Emera’s dependence on its historical footprint. While Emera considered growth opportunities in the Canadian Maritimes and US northeast, the supportive demographics and lower emission options associated with TECO’s operations provided stronger long-term growth opportunities. TECO has a number of initiatives underway to decarbonize its generation fleet. Prior to the acquisition, TECO capital expenditures were expected to total approximately $4.0 billion over the 2015 to 2019 period. This translated into 5 percent to 7 percent annual rate base growth through 2017. When factoring in the benefits of TECO’s tax assets, Emera expected the acquisition to be supportive of its overall 8 percent dividend growth target.¹⁴

Algonquin Power & Utilities’ 2019 acquisition of Ascendant Group (parent of Bermuda Electric Light Company, “BELCO”) represents another example of geographic diversification, as it further expanded Algonquin’s operations portfolio outside of North America and into Bermuda. Additionally, the acquisition provided attractive valuation metrics that are common in non-North American utility assets.¹⁵

Business diversification
In response to the continued decline in utility return on equity (ROEs) and natural gas prices, some industry participants have sought to broaden their asset portfolios and create multi-utility holding companies. Convergence of water, gas, and electric utilities under one roof is becoming a trend, especially in strategic-driven transactions.

Prior to announcing their acquisition of Peoples Natural Gas (transaction has not closed as of the publication date), Aqua America communicated to investors that the company was interested in pursuing a large, strategic utility deal. Management felt that a gas local distribution company (LDC) would fit the criteria to leverage Aqua America’s core competencies while offering growth rates on par with the
water utility industry. Up to 80 percent of Peoples’ consolidated pro-forma rate base is in Pennsylvania, which preserves Aqua America’s focus on operating within constructive regulatory environments. In addition, Peoples was expected to grow its rate base and earnings at an annual rate of 8–10 percent through 2021, which was higher than Aqua America’s estimated 7 percent organic growth rate.\textsuperscript{16}

Eversource’s acquisition of Aquarion Water Company provided an opportunity to diversify its business beyond its existing electric and gas distribution operations. Water utilities, in general, have higher earnings growth due to higher infrastructure replacement needs compared to gas and electric utilities.\textsuperscript{17} The acquisition opened the possibility of further expansion through acquisitions of municipal water systems in New England. Additionally, it provided an avenue to reallocate cash from its generation business (where earnings have declined) into a premium business offering attractive growth.\textsuperscript{18} Moreover, Connecticut’s infrastructure system replacement surcharge mechanism, combined with potential bolt-on acquisitions in the northeast, provide additional room for earnings growth.\textsuperscript{19}

Financial investors continue increasing their presence in the sector …

**Figure 6: Total deal value over time since 2009**\textsuperscript{20}

Financial investors have participated in deals for over $89B in the last 10 years

... and investor types are expanding

**Figure 7: Total deal value Pension/Sovereign Wealth Funds since 2009**

Private equity investors (PEIs), asset management companies, and specialized investment firms have been consistent investors. However, the landscape is evolving. In recent years, pension and sovereign wealth funds have made major bets in the sector. These funds are looking to deploy capital into areas that provide stable and long-term returns.
Strengthen the balance sheet
By engaging in M&A opportunities that allow them to strengthen their balance sheets, companies can be better positioned to enhance their ability to invest in expansion and grid modernization.

Following the completion of NextEra’s acquisition of Gulf Power from Southern Company, NextEra’s Management expected to have $5 to $7 billion of excess balance sheet capacity, at its current credit ratings. That capacity could be utilized to finance incremental organic investment opportunities, share repurchases, and/or additional asset or regulated utility acquisitions. Despite increasing debt load, the acquisition actually enhanced NextEra’s ability to engage in future transactions. According to UBS, NextEra reviewed the transaction with ratings agencies and expected that S&P and Moody’s would expand the company’s credit metric thresholds, as a result of the increase in regulated operations for the company.

Emera’s acquisition of TECO more than doubled its assets and EV to provide more scale and diversification. Furthermore, the deal accelerated Emera’s regulated earnings mix to 75–80 percent from 67 percent in 2014, increasing leverage and benefiting ROE while reducing earnings and cash flow volatility. During the three years leading up to the transaction, Emera’s equity had risen above its target of 45 percent of capital as a result of a reduction in regulated earnings. The acquisition increased regulated earnings and should ultimately allow it to shift back toward its target capital structure.

Innovate into new lines of business
Investing in innovative business activities allows industry participants to take advantage of technology disruptions in the industry and meet regulatory requirements for renewable standards while still providing consistent base load power.

In 2019, Duke Energy announced the acquisition of a portfolio of distributed fuel cell technology projects from Bloom Energy Corporation. The transaction expands Duke Energy’s clean, reliable energy options for commercial and industrial customers in California and the northeast region. This move is part of Duke Energy’s efforts to serve commercial and industrial customers’ evolving energy needs and provide behind-the-meter generation. Over the following 18 months, the two companies intend to deploy Bloom servers at more than 30 sites across a portfolio of customers, including hospitals, technology companies, data centers, and universities.

At the time of its announced acquisition by Algonquin, BELCO generated almost 100 percent of its electricity using fossil fuels, specifically oil and diesel. Electricity in Bermuda costs approximately 40 cents per kWh, with almost 20 cents being attributed to fuel. Bermuda’s high cost of electricity, relative to other markets, provided Algonquin with an opportunity to deploy innovative technology at a lower cost of innovation. Additionally, the local regulatory authority backed a program to aggressively replace fossil fuel generation with renewable energy. BELCO had recently installed a 10 Megawatt (MW) turnkey lithium-ion battery storage system for grid stability. High rate environments, such as Bermuda, provide opportunities to deploy innovative technologies like large-scale battery storage due to their ability to produce cost-savings that could not be achieved elsewhere.

By engaging in transactions that provide the benefits of geographic and business diversification, a stronger balance sheet, and the ability to innovate into new lines of business, many industry participants have been able to tackle major industry shifts. Addressing these challenges and opportunities not only provides companies with opportunities for future long-term growth, but also helps prepare them as they transition to the utility of the future.
What capabilities and technologies are critical to the acquirer’s future success?

Sector development and disruptions thus far put the P&U industry at an inflection point: traditional players need to transform to succeed. Digital is playing a critical role in supporting that process in multiple industries, and P&U is not an exception.

As discussed in another piece of Deloitte eminence released in early 2019, “Digital Innovation: Creating the Utility of the Future,” going forward, industry players will likely see increased opportunities to create value based on data, insights, and services, in addition to moving electrons. We have summarized a few specific points of which selected acquirers may be focused on while trying to achieve their future success.

We are expecting a significant level of innovation from the perspective of the future utility customer, power company employee, and asset manager:

- **Customer:** The utility customer of the future has a personal relationship with their utility, which provides a dedicated “smart home platform.”

**Figure 8: The future utility customer**

- **Customer:**
  - The utility customer of the future has a personal relationship with their utility, which provides a dedicated “smart home platform.”
  - New revenue streams
  - Higher participation in EE, DSM programs
  - Increased customer satisfaction
  - Help balance grid, optimize supplies
  - Open platform allows ecosystem players to plug in
  - DER as NWA to defer grid investment
  - Increased customer engagement
  - New services
  - Increased customer engagement

- **Virtual assistant (VA):**
  - Customer empowerment
  - View real-time and historic consumption
  - Receive usage and outage alerts
  - Increased customer satisfaction
  - Earn credits/rewards
  - View new offers; start, stop, move suggestions; can be automated
  - Omnichannel VA helps manage energy use and optimize dynamically by price, time, green attributes, and more
  - VA combines customer habits with external data, e.g., weather; makes personalized suggestions; can be automated

- **Transactions Management:**
  - New revenue streams
  - Help balance grid, optimize supplies
  - Increased customer engagement
  - New services
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Beyond Electricity:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Smart Home Platform:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **New services:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Peer-to-peer transactions:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Analytics:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Smart Appliances:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Reg/Market Structures:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Machine Learning:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Real-Time DR:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Internet of Things:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **Blockchain:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy

- **MCDR:**
  - New revenue streams
  - Open platform allows ecosystem players to plug in
  - Increased customer engagement
  - DER as NWA to defer grid investment
  - Sales, installation and maintenance of solar, storage, microgrids, EV chargers, and more
  - Shares in community solar
  - Other utility services (e.g., gas, water, internet)
  - Achieve net zero energy
• **Employee:** The power company employee of the future is a new-generation, tech-savvy professional who relies on connected yet independent systems, often collaborating with bots that integrate artificial intelligence (AI) to accomplish tasks.

**Figure 9: The power company employee of the future**

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<tr>
<th>FEATURES</th>
<th>REQUIRED TECHNOLOGY</th>
<th>BENEFITS</th>
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<td>FUTURE POWER COMPANY EMPLOYEE</td>
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<td>• Personalized yet integrated</td>
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</table>
• **Asset:** The future power company has real-time situational awareness of its generation, transmission, and distribution assets. Operational staff manages data as much as assets.

**Figure 10: Power company assets of the future**

As transformation forces continue influencing the sector, **digital technologies** such as AI, the Internet of Things (IoT), cloud, and blockchain can act as catalysts that help incumbents or new entrants develop capabilities to transform into a utility of the future. According to the recent Deloitte global industry 4.0 survey, utility players’ top three digital priorities are:

- Improve **power productivity and delivery reliability**
- Grow the **existing business with new revenue streams**
- Expand into new areas of business opportunities
As a result, we are starting to see a shift into more transformational M&A activity in the digital space. We define transformational M&A as activity focused on creating new markets and consumer needs while also offering new products and assets outside of the core products and assets currently offered by the organization.

**A few examples of recent digital transformational M&A activity:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction Description</th>
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<tbody>
<tr>
<td>May 2, 2016</td>
<td>Oracle acquisition of Opower, a software-as-a-service customer engagement platform</td>
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<tr>
<td>August 7, 2017</td>
<td>Enel acquisition of Enernoc, a smart energy management services player</td>
</tr>
<tr>
<td>May 9, 2016</td>
<td>Southern Company acquisition of PowerSecure, a smart grid solution</td>
</tr>
<tr>
<td>January 1, 2018</td>
<td>AES Storage launches Fluence, a Joint Venture (JV) with Siemens</td>
</tr>
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</table>

Each of these transactions had multiple transformational elements:

- Oracle’s acquisition of Opower, a software-as-a-service customer engagement platform for utilities, furthered its investment in the space by expanding **revenue streams** that help identify savings opportunities to utility **customers** and better utilize **assets**.

- The acquisition of PowerSecure (energy solutions for distributed resources and energy efficiency) by Southern Company, a utility, illustrates an expansion into **new business opportunities** to meet the demands of the **future utility customer** and provide behind-the-meter solutions as part of a "smart platform".

- The acquisition of Enernoc (a smart energy management services player) by Enel, a global utility, allows Enel to expand into demand response to allow **customers to optimize energy management**.

- The launch of Fluence, the JV between AES Storage and Siemens, is an opportunity for AES to tap into **new revenue streams** with **asset modernization**.

Additionally, the convergence of technology and utilities has attracted attention from private equity investors in recent years, with $11.5 billion invested between 2010 and 2019 into areas like energy storage, electric vehicle infrastructure, and customer energy management. 2018 was a particularly active year in the space, with $2.5 billion invested by venture capital and private equity investors representing a nearly 80 percent increase over 2017. Given that private equity investors look for undervalued segments of the market that they expect to experience high growth in the near-term, this trend aligns with our perspective that the sector will likely see a high rate of growth in the near-term.

While transformative M&A in the utility sector is still limited, the market forces at play, recent transactions, and significant private equity investment in the space lead us to believe that there will likely be more transformative transactions in the years to come.
How can M&A help unlock additional value to shareholders?

Activity drivers

In addition to the transformative technology and other strategic needs discussed above, various macroeconomic factors and the sector's financial profile further underpin why we believe that there will be increased M&A activity in the near- to medium-term. With growth in real Gross Domestic Product (GDP) slowing to 2.0 percent in Q2 2019 (vs. 3.1 percent in Q1 2019) and global volatility, a US recession is anticipated by 2021. A robust economy typically correlates with strong energy/electricity demand, and—all things being equal—strong financial growth for investor-owned utilities (IOUs) and independent power producers (IPPs); however, the implications of a US economic downturn on M&A activity in this sector is uncertain.

Macroeconomic indicators aside, the industry's credit quality and debt and profitability profiles have been reliable indicators of M&A, capex management, and overall corporate strategy. Although the industry's credit average at BBB+ is investment grade, total short-term and long-term debt in absolute terms increased to $607.4 billion in 2018 from $586.2 billion in 2017, due to capex requirements. IOUs are prioritizing smart grid technologies investments to enhance resiliency and reliability, improve operating efficiency, and integrate the growing influx of distributed energy resources (DER) on the grid.

Capex was expected to increase to $136 billion in 2019 (vs. $119.5 billion in 2018) and we expect this heavily leveraged trend to continue for US IOUs and IPPs. This is highlighted by relatively higher debt-to-equity ratios, as compared to the rest of the S&P500 (figure 11).

Figure 11: Total Debt/Equity Snapshot – S&P500 and P&U Sector

Note: All Deloitte Selected are all US Regulated and Unregulated IOUs and IPPs.
Pressure from the outside

With ~$300 billion of funds deployed, activists have been increasing their campaigns, focusing on businesses with lackluster performance. IOUs are facing pressures from activists to divest, restructure, and more efficiently deploy capital to increase shareholder value. Many activist investors have gotten seats on boards and are thus able to drive key strategic decisions, including M&A. For instance, Elliott Management and Bluescape Energy pushed FirstEnergy and Sempra Energy to divest their respective merchant and renewable assets, in an effort to unlock billions in value. We expect to see more of this, which may result in divestitures and buying opportunities for those looking for lower-cost investments.
Power & Utilities Sector Evolution | Unlocking value through M&A

**Keys to success**

In a dynamic M&A environment with low interest rates and accessible and inexpensive financing, which suggests a likelihood of M&A activity in the near future—winning and creating value may require something more. From an M&A strategy standpoint, industry players can better position themselves for success by stepping ahead of the game to become (advantaged) acquirers and develop a robust portfolio. These two elements are often critical components to unlock incremental value to shareholders.

On one hand, a set of detailed action steps can help companies within the P&U sector proactively identify and transact strategic deals rather than reactively pursue disparate, ad-hoc opportunities. A large portion of M&A transactions do not deliver the value promised at the time of the deal. Acquiring companies can avoid this fate with a disciplined process that enables them to identify value-creating targets and avoid the likely underperformers, thereby maintaining a competitive edge and delivering shareholder value.

The tenets of this approach typically include the following:

- **Perform a Self-Assessment**
  A company’s executive team should perform a self-assessment of the organization’s strengths and developmental areas to identify opportunities that competitors cannot easily replicate.

- **Identify Priority Pathways**
  By conducting a careful assessment to understand what their M&A objectives are, companies can identify priority pathways at the business-unit level that address new products or solutions they will bring to market, adding value to customers.

- **Engage in Competitor Signaling**
  Examine competitors’ M&A deals over the last several years in terms of geographies, capabilities, size, product or service offerings, and targeted customer segments. Past behavior often foreshadows which acquisition targets may be next on competitors’ priority lists.

- **Carry Out a Strategic Screening Process**
  Target screening filters the deal universe in those pathways to generate portfolios of priority candidates. These filters may include everything from size, geography, and customer segments to technology and talent.

- **Prioritize Disciplined Execution**
  It can be difficult to analyze synergy potential or conduct a detailed valuation without evaluating integration risks such as compensation, autonomy, and labor disputes, while determining if the right resources and talent are available to integrate the acquisition effectively.
Once a company has completed its self-assessment, strategy development, target identification, and prioritization, the viability of a particular deal should become increasingly clear. By becoming an advantaged acquirer, industry participants may be able to better position themselves to continually deliver shareholder value by engaging in M&A activity.

On the other hand, while developing a disciplined approach allows companies within the P&U sector to proactively identify and transact strategic deals, another central objective of corporate strategy is for executive management to think holistically about a company’s portfolio of businesses. Doing so involves conceiving and spearheading ways to make the aggregate value of a company’s holdings durable over time and greater than the sum of its parts. Our research has demonstrated that robust portfolios should be strategically sound, value-creating, and resilient.

First and foremost, a strong portfolio should be strategically sound. It should foster a strong competitive position, support multiple levels of innovation, and create synergy:

- **Competitively positioned:** A PEV company’s businesses in aggregate should participate in more structurally attractive markets and can more effectively compete in their chosen ones. Thus, an effective portfolio is weighted in favor of structurally attractive markets in which the company has demonstrated an ability to produce attractive returns over time.

- **Blend of innovation:** Support a spread of innovation initiatives across core, adjacent, and transformational horizons, consistent with the degree of threat and opportunity presented by disruptive technologies, disruptive business models, or competitive activity in the industries represented in the portfolio. For example, the decline of both LCOE for new-build renewable energy and battery prices can help industry participants to spread innovation across multiple horizons simultaneously while responding to industry disruption.

- **Create synergy:** Add value above and beyond that which could simply be created (and captured) within the existing stand-alone businesses. Articulating the synergies in a portfolio is not only necessary when designing a new portfolio, day-to-day portfolio management is increasingly important as shareholders ratchet up the pressure on public P&U companies. Because cost-savings are typically passed on to customers, capturing synergies can be challenging. However, innovation enables industry participants to unlock value and create synergies.

An advantaged portfolio should create more value than alternative portfolio options, which can be viewed through at least a couple of lenses to help provide a clear picture (e.g., intrinsic value, capital markets value). Focusing on any single lens—to the exclusion of others—creates a potential risk of overlooking value-creation opportunities:

- **Intrinsic value:** Value that can be best represented by the risk-adjusted cash flows (net of investments) a corporation’s existing (and expected future) businesses produce and is best measured by a discounted cash flow (DCF) analysis. An advantaged portfolio is simply one whose intrinsic value is greater than that of competing portfolio options, all other things being equal. Moreover, P&U industry participants can create value over time by improving intrinsic value—whether by increasing returns on existing capital employed, consistently investing new capital to generate returns that exceed a company’s cost of capital, or by releasing unproductive capital, all of which can be facilitated through pursuing M&A as a strategic option.

- **Market value:** Value that is driven by market expectations and should align with intrinsic value. In practice, the two measures of value can diverge at a given moment for reasons not related to business performance. In such cases where intrinsic and market values diverge, a company may have to (or wish to) make changes to its portfolio that it would not otherwise make. As executives evaluate or redesign their portfolios, they should consider the potential stand-alone value of each business to different potential buyers and compare those values to the intrinsic value of keeping the business within the portfolio.
An advantaged portfolio should not only be strategically sound and value-creating, but also **resilient**. A resilient portfolio is designed to survive scenarios, build optionality, and weigh feasibility and risk:

- **Survive scenarios**: A strong portfolio is one that, in aggregate, is more likely to perform well in a variety of different, plausible, future environments. A company should create a number of scenarios (such as a range of electric or fuel price forecasts) and portfolio options and evaluate the likely value of the options in each scenario. Scenarios not only serve an evaluative purpose. They also play a creative role, helping power companies generate strategies and portfolio options.

- **Build optionality**: Significant uncertainty is pervasive across industries and geographies, and the P&U sector in the US is no exception. A strong portfolio prudently builds optionality into its portfolio choices, thus enabling multiple potential routes to value in the future. Several tools can help create such optionality, including:
  - Stage-gating
  - Defining transaction pathways
  - Identifying trend triggers

Optionality, in the portfolio sense, involves hewing to one path that has many forks when a defined event occurs. This helps keep a company on one path at a time.

**Weigh feasibility and risk**: Feasibility addresses the challenges of constructing a new portfolio, and risk addresses the potential for unfavorable developments once the portfolio is created. The portfolio of today, indicative of a company’s current strategy, constitutes a certain risk profile. Alternative portfolio options present different risk profiles in both the nature and magnitude of risk. A strong portfolio is one whose feasibility and risk are more attractive than alternative portfolios, given the company’s ambition and risk appetite.

A strong portfolio of businesses—one that is strategically sound, value creating, and resilient—is at the heart of many successful companies. The attributes discussed above illustrate what a strong portfolio should look like, at least at the most basic level for a typical company. They can serve as a valuable guide for executives in their ongoing work to define the businesses in which they should participate and the ways in which they create value within and across their businesses.
Wrap up: There is meaningful opportunity to win in the market

Going forward, if there is anything we can expect, it is continued innovation and disruption in the P&U space, which we believe will likely bring more and more diverse opportunities for M&A. The shale revolution, along with the growing importance of distributed energy resources and the need for capital investments required to modernize the grid through digital technology, should continue pushing industry players to grow inorganically.

We have identified four main themes that drive M&A: geographic diversification, business diversification, strengthen the balance sheet, and innovate into new lines of business. These have and should support the continued expansion of inorganic growth in the sector, even though operational synergies in regulated utilities that are generally passed on to customers cannot be fully enjoyed in M&A deals (which in other industries is a significant reason to go after M&A).

Innovation will become more and more important as a driver for M&A, particularly in the digital space from the perspective of the future utility customer, power company employee, and asset manager. Today, industry executives are acknowledging the need for digital innovation to help improve company performance and widen the top line, which explains why we have been starting to see deals pushing along those lines in recent years. We also anticipate increased M&A activity in the sector due to the high leveraged financial profile and pressure exerted by shareholder activism.

Whether the theme is geographic diversification, business diversification, balance sheet driven, or innovation driven, successful M&A should be achieved by advantage acquirers that develop a robust pipeline and story focused on long-term value creation.
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