



Powering the future

The COVID-19 outbreak has presented power and utility leaders with a unique opportunity to rebrand the industry as an *uber-essential* service

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In the war against COVID-19, there is a renewed appreciation for the front line. Healthcare providers and first responders—but also grocery store workers, gas station attendants, and the like—have been applauded for delivering the essential services that keep our country running, at their own personal risk.

Equally important are the power and utility companies that provide the electricity that keeps the lights on. Lights, as well as phones and the internet, make it possible to run hospitals, government offices, police departments, and fire stations, not to mention our homes and businesses. Aware that a reliable power grid is the critical underpinning for all other services, utilities have made heroic efforts to deliver dependable power and support to customers during this time of unprecedented medical and economic urgency.

The public doesn't usually think of utilities in heroic terms—nor do utilities look at themselves through that particular lens. However, **the current public health emergency has presented an opportunity for utility leadership to pivot their companies' branding from old-school and reliable to innovative and *uber-essential*, able to evolve in close step with the rapidly changing needs of their customers.** This shift will be critical to utilities achieving not only resilience but also growth in the post COVID-19 world.

Now is the time for power and utility companies to begin a new chapter in their long history of serving the public. In this new chapter, trust and positive customer experiences are table stakes—and the imperatives that define the future will be efforts to (1) empower residential customers, (2) enable a more resilient commercial sector, (3) pioneer new ways of working with regulators, and (4) address branding from the inside out in order to support the brand and evolving ways of working in the new reality.

The customer at the center

In this new service paradigm, a laser focus on the customer is key. Over the years, customers' evaluations of their experiences with utilities have been low compared to many other industries.ⁱ The KPMG 2018 Customer Experience Excellence (CEE) study revealed that customers had a relatively low opinion of utilities' ability to provide them with a positive experience, and, in 2019, that score dropped an additional five percent.ⁱⁱ However, the CEE score for this year is up 8 percent,ⁱⁱⁱ which supports the conventional wisdom that public trust in utilities has been on the rise since the outbreak began.^{iv}

Interactions with customers should reflect the following attributes: empathy about their unique circumstances; personalization of services and modes of outreach; minimal time and effort to resolve issues; the ability to meet and exceed expectations; seamless interactions; and demonstrable integrity to engender trust. (More in the chart below) Particularly germane to the rebranding of the utility industry at this particular moment are integrity and

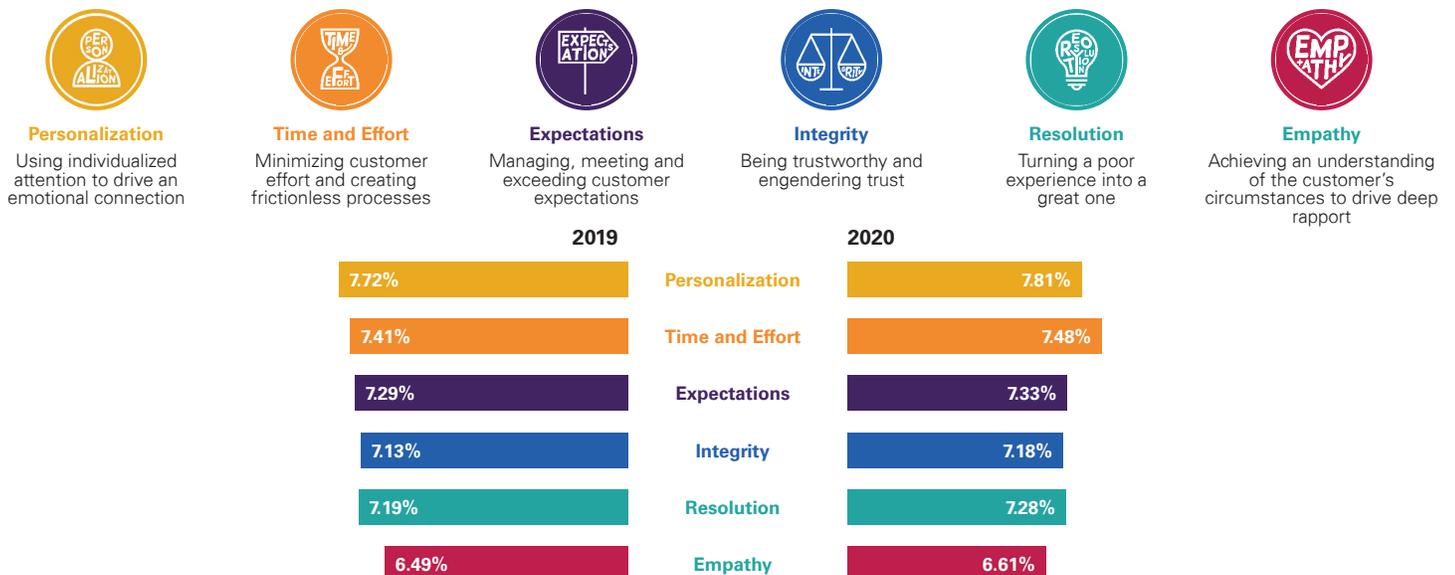
customer experience, which were reflected in our CEE survey as follows:

- **Integrity**, which encompasses trust, is measured by an organization's environmental conscience, ability to deliver on its promises, and reliable services.
- **Customer experience**, which comprises several attributes measured in the survey including empathy and personalization, should focus on ways to treat all customers as if you understand them and their distinct circumstances.

Building on the good will the industry has engendered since the start of the outbreak is critical, since customers have more choices than ever from renewable energy (ESCOs) to microgrids. Instead of working against these alternatives, utilities should position themselves as partners with their customers, who understand the unique challenges of this particular point in time and are willing to do whatever it takes to keep our country running.

KPMG Six Pillars of Experience Excellence

The six pillars are fundamental components of every great customer experience identified and validated through more than 4 million evaluations across 27 countries, regions and markets over 10 years. **The following chart reflects the changes in customer experience with the utility industry from 2019 to 2020.**





Empowering the residential customer

Empathy and personalization across all interactions

As consumers have become accustomed to real-time communication, convenient online services, and meaningful engagement in all aspects of their lives, they have the same expectations of their utility providers.

Next-level reliability. The global outbreak of COVID-19 has expanded the function of the home beyond a safe place to live. Since, for many, the home has become both an office and a school, reliable electric, phone, and internet services can be critical to employment stability and effective virtual learning. Further, these services help residential customers protect their families from exposure to the virus by allowing them to conduct critical activities from the home, e.g., online food shopping and medication refills; telemedicine for nonemergency doctor visits and ongoing symptom management for chronic illnesses; video calls with family and friends, among many other activities.

Across the country, utilities have been lauded for maintaining services in these challenging times, responding to the COVID-19 outbreak with the same diligence and responsiveness as natural disasters, such as hurricanes, floods, and fires. Consumers are recognizing that resilience and recovery are in utilities' DNA, as is evidenced by their extensive ongoing efforts to protect the grid through measures like vegetation management, hardening the grid infrastructure, and cyber security programs.

By empowering consumers to run their lives from home, utilities can increase their trust and improve the customer experience. However, there is significant room for improvement here: **Utilities have fallen below most other industries on trust and integrity in our CEE survey for several years running.^v**

Financial flexibility. The economic consequences of the COVID-19 shutdown have been historic. Utility industry experts say that escalating bad debt is the worst they've ever seen. While states and regulators have put moratoriums on utilities' credit mitigation strategies, unpaid bills are piling up and it is unclear whether consumers will be expected to make restitution all at once when the crisis abates.

Utilities need to stay ahead of residential customers' ability to pay their bills—using advanced analytics to track such variables as missed payments, autopay cancellations, inquiries into reduced payment options for the unemployed, and dramatic cuts in usage. As a result, utilities can protect not only their customers' bottom lines, but also their own, by prioritizing collections according to customers' financial circumstances and developing customized payment programs.

Further, as usage shifts even further to the home in the coming months, all customers, regardless of their ability to pay, will view their utility bill with greater scrutiny. Therefore, utilities that haven't done so already should consider offering real-time, automated smart meter readings to improve customers' trust in the accuracy of their utility charges.

If utilities become more empathetic and proactive partners in helping residential customers resolve their payment issues during this challenging time, it could go a long way toward securing brand loyalty.

Utilities' empathy scores are already on the rise, with a 1.9 percent increase between 2019 and 2020, as reflected in our CEE survey.^{vi}



Omnichannel communication. A positive customer experience is never more important than in times of crisis, whether it's a natural disaster, a brownout or blackout, or a health crisis like COVID-19. Customers depend upon regular, personalized communication and outreach through a variety of channels such as web portals, Facebook, Twitter, text messages, and email.

Utilities with high customer service ratings collect substantial data on outages—where they occurred, how long they lasted, who was impacted, and which homes have backup generators and/or other on-site capabilities such as solar panels. Based on this data, they can conduct targeted outreach to help customers deal with the impact and aftermath of storms and other disruptive events. Some other innovative offerings utilities are exploring include personalized apps for real-time monitoring of usage, storm updates, and outage alerts, and smart platforms driven by data on customer experience.

Utility leaders recognize the need to enhance communication with customers and have been accelerating their efforts to digitalize their customer-facing applications, according to 83 percent of energy respondents to our 2020 CEO Outlook survey.^{vii}

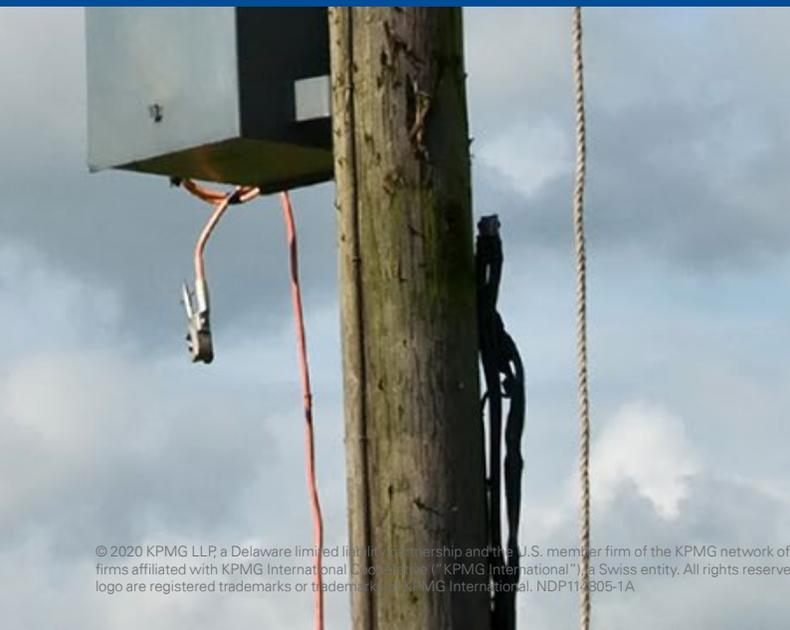
ESG: Although environmental, social and governance (ESG) initiatives are already priorities for most utilities, these efforts should be clearly visible to their residential customers. Some examples of ESG initiatives that have arisen during the COVID-19 outbreak include implementing moratoriums on shut-offs; instituting bill relief programs; partnering with local organizations to help provide food relief; supporting the well-being of utility employees; and acknowledging racial and socioeconomic inequities in the effort to ensure that everyone has continuous and sufficient access to services.

It is notable that 48 percent of energy respondents to our CEO survey say that the crisis has driven home the need to shift efforts toward the social components of ESG. For example, in regard to antidiscrimination and anti-Black racism, 72 percent of respondents say they are confident or very confident that they are taking appropriate measures. Although these numbers are encouraging, the fact that only 14 percent have announced specific antiracism initiatives indicates that there is still plenty of opportunity for utilities to be bolder in their efforts.^{viii}

Finally, reduced carbon emission rates resulting from the COVID-19 shutdown have only increased awareness of climate change across all strata of society. Efforts to combat climate change continue to be a critical part of utilities' ESG endeavors, with extensive investments being made in renewables such as offshore wind, and concurrent efforts with regulators to introduce renewable resources into the rate base.



76 percent of energy respondents to our annual CEO Outlook Survey said they want to lock in sustainability and climate change gains resulting from the crisis.^{ix}



Enabling a more resilient commercial sector

Expectation management and visibility of green initiatives

Since the COVID-19 shutdown began, lower energy demands from temporarily shuttered businesses have reduced utilities' commercial and industrial revenue streams. Further, many small stores, restaurants, and bars have shut their doors for good, with potentially many more to follow. According to the American Bankruptcy Institute, 800 small businesses filed for bankruptcy between February and July 2020, and the total number of bankruptcies this year is expected to be 36 percent higher than the same period last year.^x If the commercial energy load declines permanently, utilities will be impeded in their future investment efforts, which will only be exacerbated if they don't have revenue decoupling mechanisms in place.

Intelligent forecasting. In this climate, commercial customers want to know what to expect in terms of rate changes, payment forgiveness, and new services that can help them save money. Therefore, utilities should take steps to understand the breadth of their commercial customers' challenges and their ability to weather the crisis, which will require a more advanced approach to forecasting.

Traditional forecasting is useful when commercial customers are stable, allowing utilities to project usage levels months or years in advance based on the work their customers do, how much they spend, and how much electricity they use. Given the lack of financial stability businesses are currently experiencing, it has become very difficult for utilities to continue with this forecasting model.

For example, a senior vice president at a major East Coast power utility says it takes him more than two weeks to get updated load forecast and sales projections, and, when he finally gets them, they have often changed numerous times since he first made the request.

By contrast, forward-looking utilities will use intelligent forecasting,^{xi} which leverages predictive modeling, external data, advanced analytics, and machine learning to identify which commercial accounts are problematic; understand how sensitive commercial entities might be to rate increases; and predict operational outcomes and more accurately link them to financial outcomes.

Partnering on sustainability. Although resilience is critical in the near term—taking the form of emergency procedures like vegetation management, increased cyber security, and measures to protect the grid—sustainability will be even more important in the new reality. Utilities should strongly consider stepping up their ESG efforts to help strengthen their communities and stabilize the economy as all sectors struggle to recover, which would go a long way toward amplifying commercial customer trust.

With the increased spotlight on climate change and green initiatives, utilities will want to find ways to more effectively partner with commercial customers on these efforts.

For example:

- **Power sharing:** Some power and utility companies are engaging in distribution management, allowing them to sell unused electrical capacity to other companies. One way to do this is through creation of electric storage resources (ESRs), which allow a rapid transition between withdrawing and injecting power, depending on system conditions.
- **Demand response:** Forward-reaching utilities can build upon their current demand response programs by making better use of data analytics. During the shutdown, remote working, sheltering-in-place directives, and reduced economic activity caused shifts in demand from commercial to residential customers.^{xii} Data-driven demand response programs allow allocation of supply and consumption of energy to improve state-of-charge (SOC) management, which helps ensure that electricity is provided when and where it is needed.^{xiii} Further, many utilities are using advanced metering and modernization of their grids to improve the end-to-end flow of information to customers.
- **Green energy:** The pressure to add carbon-free energy to utilities' offerings is growing.^{xiv} Fifty U.S. utilities have already committed to carbon reduction goals, including 21 companies that pledge to become carbon free by 2050.^{xv} Further, as initiatives proliferate to increase the number of charging stations for electric trucks on U.S. highways, utilities are uniquely positioned to help create the infrastructure and support their commercial customers in "greening their fleets." (See "Green energy initiatives in flight" on the next page) In general, utilities need to ensure that they are leaders or fast followers in green energy initiatives and ensure that their commercial—and residential—customers are aware of their efforts to protect the environment.



Green energy initiatives in flight

Electric utilities are already supporting a number of internal and external green energy initiatives:

- Southern California Edison (SCE) is procuring a 770 MW/3,080 MWh package of battery resources to bolster grid reliability.^{xvi} The procurement is the largest amid a state-wide effort to address potential shortfalls of energy in California and continue efforts to increase the amount of renewable energy in the grid.
- San Diego Gas & Electric, one of the Sempra Energy companies, has the largest electric storage system in California, which can store 120 megawatt hours of energy.^{xvii}
- Puget Sound Energy (PSE) has announced notably aggressive de-carbonization goals that include net-zero methane emissions by 2022, coal-free operations by 2025, carbon-neutral electric systems by 2030, and 100 percent clean electricity generation by 2045.^{xviii}
- The West Coast Clean Corridor, founded by Puget Sound Energy (PSE), Seattle City Light, Southern California Edison, and nine other utilities, supports the installation of higher-voltage, medium-duty-truck charging stations at 50-mile intervals from Canada to Mexico.^{xix}
- NextEra Energy of Florida, which comprises two traditional electric utilities and its core business of renewable energy from wind and sun, reports 2018 emissions rates that were lower than the national average by 96 percent for CO₂, 91 percent for sulfur dioxide (SO₂) and 55 percent for nitrogen oxide (NO_x). The company reports that these efforts have saved customers almost \$10 billion since 2001.^{xx}
- Exelon, which provides electricity to 48 states, the District of Columbia, and Canada, boasts a generation fleet CO₂ emission rate that is 90 percent lower than the industry average.^{xxi}
- American Electric Power, headquartered in Columbus, Ohio, manages a renewable portfolio comprising solar, wind, and natural gas, which amounts to 1,572 MW across 11 states.^{xxii}
- AVANGRID of Connecticut has produced 17,479 gigawatt-hours of electricity through wind and solar facilities, via its AVANGRID Renewables division. This accomplishment translates into the avoidance of 12.3 million metric tons of CO₂ emissions or the equivalent of removing 2.6 million cars from the road for a year.^{xxiii}

Working with regulators

A shift from negotiation to collaboration

Given the electric power industry's growing recognition as an uber-essential service among residential and commercial customers, utilities need to be bolder about how they communicate with regulators and advocate for cost mitigation and more favorable rate cases. Utilities are in a strong position to shift their interactions with regulators from negotiation to collaboration. Together they can seek to address issues that include protecting the environment, offering customers greater choice, and addressing social equity issues through programs such as economic hardship funding.



Cost recovery. Utilities can use advanced analytics and predictive modeling to better demonstrate to regulators the impacts of the economic downturn and make a strong case for cost recovery. Utilities' documentation should be meticulous and include bad debt from residential customers, revenue reduction due to commercial/ industrial loss loads, and offsets from payroll tax credits and other stimulus payments. With an integrated financial forecasting approach, utilities can model a range of potential outcomes, including changes in the mix and levels of energy consumption; expected future payment behavior and delinquencies based on economic data and customer payment trends; and potential charge-off levels based on projections of the length of the crisis. Ultimately, utilities can use these analyses to present regulators with a compelling case for cost mitigation, payment and collection process adjustments, and appropriate rate cases.^{xxiv}



Rate-case adjustments. Regulators are currently assessing the financial impact on utilities of existing rate structures. They are also taking a closer look at performance-based ratemaking (PBR), through which utilities are rewarded for positive metrics across such areas as efficiency, customer service, and the use of renewable energy sources. Since it was introduced in the 1990s, PBR has been adopted in a number of states, as well as in other countries such as Australia and the United Kingdom. For example, Hawaiian Electric Industries uses a performance-based rate-making process, where rates are tied to outcomes, including the increased use of wind and solar.^{xxv}



Staying ahead of potential regulatory change. Since regulators have mandated moratoriums on utilities' credit mitigation strategies—and, in some states, pressured investor-owned utilities to offer discounts—utilities would be wise to anticipate and plan for a variety of regulatory scenarios in the coming months. There could be regulations requiring price concessions, widespread forgiveness, new repayment plans, and others governing the recovery of bad debt. Further, as ESG continues to gain attention, utilities could face increasing pressure not only from customers and investors, but also from regulators to adopt more rigorous measures to combat climate change.



Rebranding from the inside out

Focus on agility and technology transformation

As utilities seek to rebrand themselves, it is important to remember that every rebranding effort must also involve internal change management.

Increasing agility. Historically, utilities have been extremely hierarchical and functionally siloed, with much more focus on reliability than agility. Making the structural changes to continue to thrive in a post COVID-19 world requires a much more agile approach to operations and meeting employee needs.

It is important to remember that utilities have already shown uncharacteristic agility in their response to COVID-19. During the shutdown, many utilities successfully pivoted to new remote working models to protect their employees—shifts that would have been almost unimaginable only a year ago.

Utility leaders seem to recognize that shifts in their operational models might complicate their efforts to retain key employees, hire talent, and keep their workforces productive if there is a second wave of COVID-19. According to our 2020 CEO Outlook, 23 percent of energy CEOs identified “talent risk” as the number one threat they face over the next three years—a finding that represents a significant increase from last year when talent risk was the lowest ranked on energy CEOs’ list of potential risks.

Clearly, there is great value in treating utility personnel as front-line, essential workers, not only by the public but also by the utilities themselves. As Connie Lau, president and CEO of Hawaiian Electric Industries, said about procuring personal protection equipment (PPE): “We needed to get across the message that our electricity workers were very important in getting us through COVID...Without electricity, the hospitals can’t operate, there are no ICUs, and the ventilators can’t be on. And so we were able to work with our federal partners to get some priority PPE for our most critical workers.”

It is encouraging that utilities’ efforts to protect employees during the pandemic have not gone unnoticed. According to the annual KPMG Worker Pulse Survey, 86 percent of utility workers surveyed say their organization acted quickly to create a safe working environment for everyone, and 88 percent say their organization effectively communicated about updates and changes to the business.^{xxvi}

Technology transformation. The crisis has accelerated utilities’ adoption of digital operations and data collection, which are central to well-functioning virtual work models as well as to how regulators perceive utilities. In fact, 80 percent of energy industry respondents to the KPMG 2020 CEO Outlook said they have either accelerated or rapidly accelerated their efforts to digitalize operations and create a next-generation operating model since the outbreak began.^{xxvii}

— **Employees:** If utilities ever needed an incentive to move to automatic meter infrastructures (AMI) and other smart meter technologies, COVID-19 has provided it. Such technologies reduce utility workers’ exposure to the virus, as well as catastrophic weather conditions and other hazards, while significantly reducing labor costs over the long haul. The vast majority of utility workers responding to the KPMG Worker Pulse Survey are satisfied with the direction in which their organizations are moving on the technology front: Nine out of ten energy workers say their organization provided resources to help them work effectively under new conditions, and 86 percent say their organization provided the technologies they need to be successful at their jobs.^{xxviii}

— **Regulators:** When it comes to regulators, utilities need to be able to demonstrate that, given current restrictions on capital investments, they are shifting resources to operational improvements such as moving data to the cloud and upgrading their data analytics capabilities. Utilities can choose from a wide range of digital technologies that are already available and proven in other industries. These include drones, satellite, or LiDAR imagery to map the network and identify defects; artificial intelligence to process the imagery from drones and satellites to predict failures; advanced distribution management systems to orchestrate network flows; and robotic process automation in the back office.

In addition to being able to accommodate remote work, utilities with advanced digital infrastructures already in place have been well positioned to help customers during the crisis. For example, “[Puget Sound Energy] used [its] digital investments to complete a low-income assistance portal and help customers who were suffering as a result of COVID-19. [We] were able to bring \$11 million into play for customers to assist them with bills. As of today, about 9,000 customers have received the benefit of this assistance,” according to Mary Kipp, PSE’s CEO.



Looking ahead

Today's challenges offer historic opportunities for utilities to pivot in how they position their brands and transform their operating models to reflect the fact that the electric power industry provides a critical essential service. Some first steps to keep in mind include:

- 
Recognize that power and utility companies should be leaders, not laggards, in the global energy transition over the coming decades.
- 
Enhance communication and engagement with both residential and commercial customers, which is particularly important in times of stress.
- 
Accelerate the adoption of digital technologies to introduce new offerings, enhance service delivery, and strengthen customer engagement across multiple channels, while also reducing operating costs.
- 
Anticipate long-term changes in the regulatory landscape, including a greater emphasis on ESG and sustainability and efforts to mitigate revenue loss incurred during the shutdown.
- 
Rethink the needs and expectations of employees to ensure their needs are met as new technologies, flexible operational environments, and virtual models are introduced.
- 
Rationalize traditional brick-and-mortar working environments, questioning assumptions about both office and field operations.
- 
Acknowledge that the current crisis will most likely not be the last and that changes made to address the COVID-19 outbreak may become the new normal.



As utilities choose the best path forward to deal with immediate and longer-term challenges, it is critical to remind customers that they have been there for them through thick and thin: They have kept the lights on during storms and crises, offered debt forgiveness in times of economic strife, absorbed and shifted load patterns, and continued to operate safely. In other words, they need to continue to shift their brand perception so that they are viewed as one of the most trusted essential providers in the new reality.

How KPMG can help

KPMG helps electric power utilities “future proof” their operating models to prepare for both foreseeable and unpredictable forces that are fundamentally changing the industry. These forces include, but are not limited to, economic and societal turbulence; increased demand for green alternatives, microgrids and energy storage; talent management challenges in the new reality; the entrance of nontraditional utility players; technology disruption; evolving regulations; and the need to secure and upgrade the energy infrastructure.

Our experienced industry professionals, who draw from the disciplines of engineering, finance, risk management, economics, and regulatory affairs, work extensively with generation, transmission, and distribution utilities in the gas, power, and water sectors to create value, increase agility, and reduce risk. Our clients turn to us as they look for growth opportunities and seek to fine-tune the supporting organization’s capabilities to ensure efficient and secure delivery, as well as significant improvements in environmental performance. Our engagements range from simple to complex operating models, and from straightforward function review/ benchmarking projects to full-blown business transformation programs.

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Endnotes

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