Guest Editorial

Ten Resolutions for the Energy Industry in 2024

Jason Price and Niki Shah

INTRODUCTION

Welcome to the fourth edition of the annual Top Ten Resolutions for the utility industry. These ten resolutions illustrate a renewed vigor and determination entering the New Year to make progress toward accomplishing so many things. Now armed with unprecedented federal funding and a majority of public support, the call for modernizing our energy system action and subsequent acceleration of this action is louder than ever. While utility priorities continue to change as the industry and world transform to a clean energy economy, utilities continue to rise to the occasion, and utility leadership continues to seize opportunities with a continued mission to deliver safe, reliable, clean, and low-cost energy.

2024's resolutions introduce entirely new topics for the industry compared to previous years. Since the transformational Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) passed in 2021 and 2022, and the enactment of the CHIPS Act in 2022, the workload to bring the clean energy transition to fruition is monumental, and the call for action is even greater. By utilities making these ten resolutions part of the investment plan for the New Year, there will be a renewed focus on tapping into opportunities to help build a better energy future for all. Let's make 2024 the year that plans are fully embedded in the actions of industry leaders and regulators alike.

Jason Price is a director of industry strategy and client development in West Monroe's Energy and Utilities Practice, based in New York City. He is a graduate of the NYU Clean Energy program and the host of the *Power Perspectives* podcast on Energy Central. **Niki Shah** is an experienced consultant in West Monroe's Energy and Utilities Practice, advising energy and utility clients on their climate action, initiative deployment, and regulatory strategies. The authors would like to thank Paul DeCotis and Jeremy Klingel for their contributions to this editorial. The views are those of the authors and not of West Monroe. Please contact the authors for questions and comments at japrice@westmonroe.com and nshah@westmonroe.com.

While utility priorities continue to change as the industry and world transform to a clean energy economy, utilities continue to rise to the occasion, and utility leadership continues to seize opportunities with a continued mission to deliver safe, reliable, clean, and low-cost energy.

1. BUILD A RELATIONSHIP WITH ARTIFICIAL INTELLIGENCE (AI)

AI has become one of the hottest topics during 2023. It offers informed decision-making through data-backed predictions and modeling, using historic trends and statistical methods. AI offers the ability to transform the energy space, such as personalizing customer interactions to meet their unique needs, using solutions like AI chatbots for outages, billing issues, and energy offerings. AI can even support the mitigation of wildfires using satellite intelligence for greater detection abilities and improved insights into real-time data.[1] The potential is endless when integrating and leveraging the

[1] Office of Energy Infrastructure Safety. (n.d.). *Global Strategies for Utility Wildfire Mitigation*. Retrieved from https://bit.ly/46YiB62

opportunities of AI. Investing in dedicated teams to support analytics and AI adoption will motivate the utility in optimizing grid performance and maintenance, and improve the customer experience.

Investing in dedicated teams to support analytics and AI adoption will motivate the utility in optimizing grid performance and maintenance, and improve the customer experience.

2. EXPAND TRANSMISSION INVESTMENT

Ambitious decarbonization and renewable energy generation goals are dependent on the expansion of our transmission and distribution networks. Better interconnections within and between grids will also quicken recovery from extreme weather events, connect states and regional markets for interregional sales, and reduce costs. As more funding around transmission becomes available and federal regulatory bodies streamline siting and permitting processes,[2] the success of investments will continue to be dependent on strong due diligence and widespread public acceptance. Consider low-impact siting for project development, such as previously developed and underused lands, and use existing infrastructure rights-of-way to create a more sustainable strategy. Low-impact siting supports goals of environmental conservation and responsible infrastructure development, while also increasing access to underserved communities. Identifying an experienced and skilled team to navigate and analyze such challenges and solutions will streamline the energy industry's journey to meet future energy demands.

3. PLAN FOR THE FUTURE OF NATURAL GAS

Natural gas distribution utilities are facing huge challenges in addressing a myriad of decarbonization pressures. These pressures are taking many divergent forms, from formal whole-market and sector studies supported or mandated by governors and legislatures to the enactment of stringent local and county-level building standards. Appliance standards are also beginning to force out natural gas appliances. At the same time, there are significant opportunities associated with new funding for innovation through the IIJA and IRA stimulus appropriations, including new state-level emphasis on the role of natural gas companies to support customer efficiency, and a strong embrace of improving infrastructure to reduce direct greenhouse gas (GHG) emissions from utility assets (Scope 1 fugitive emissions). However, many of these external pressures are largely uncoordinated. Not only do they carry big risks in the form of deflecting attention and resources away from other programs and investment priorities, but they are also difficult and time-consuming to track and respond to in an impactful way. New forms of collective action—such as landfill gas capture, hydrogen, liquified natural gas, and renewable natural gas—may be warranted by the natural gas industry to mount an effective case in support of its role in a decarbonized future. This issue is complex and challenging to address. Simple talking points are not sufficient to comprehend the potential role of gas in the foreseeable future.

New forms of collective action—such as landfill gas capture, hydrogen, liquified natural gas, and renewable natural gas—may be warranted by the natural gas industry to mount an effective case in support of its role in a decarbonized future.

4. RETURN TO THE CORE BUSINESS

Regulated utilities are increasingly returning to what they know best: operating critical infrastructure in a highly structured and governed operating model where reliability, cost-effectiveness, and safety are paramount. This is demonstrated by the recent sales in the renewables business and consolidation of natural gas majors; it is a methodical migration to doubling down on providing reliable power and modernizing the grid—as opposed to growing non-core businesses. Some utilities are carving out deregulated renewable assets and

[2] Grid Deployment Office. (2023, August 29). *Transmission Siting and Economic Development Grants Program*. U.S. Department of Energy. Retrieved from https://bit.ly/3FJaEWe

natural gas distribution and interests in liquified natural gas (LNG). All of this is done to bolster and expand their core regulated businesses. Wall Street has generally taken a favorable view of these divestitures, and the infusion of cash is a nice shot in the arm for investor-owned utilities' (IOUs') earnings per share in what continues to be a challenging economic climate. The increase in cash for IOUs could either fuel future acquisitions that tie back to the utility's core business (i.e., enhance asset and resource bases and generate a greater regulated return), or reduce debt and bolster their balance sheet.

5. INCLUDE THE COMMUNITY

Rule makers at the U.S. Department of Energy (DOE) have made it explicitly clear that every federal grant-funded project must articulate and demonstrate meeting community benefit needs and policy objectives. No matter how great the need or merit of the funding request, the investment thesis must address the net benefit to the communities it serves. Utilities and private developers are required to develop a Community Benefits plan to support and collaborate with local communities expected to be impacted by planned energy and infrastructure projects. It is imperative that long-term roadmaps include goals and a strategy around community and labor engagements. Energy leaders must address job creation and investment in the workforce, support for diverse and/or community-based organizations, and progress for Justice40 initiatives which mandate that at least 40 percent of the benefits of certain federal investments must flow to disadvantaged communities. Designing such a roadmap will not only help in securing project funds, but also grow tomorrow's workforce and support improved community and social economic well-being.

6. MODERNIZE VEGETATION MANAGEMENT PRACTICES

The summer of 2023 witnessed record-breaking heat,[3] which led to extreme weather events around the world including wildfires, heat waves, and dangerous flooding. We can expect conditions to worsen as the impacts of climate change take their toll on communities, people, and infrastructure. To maintain and improve resiliency through these conditions, utilities need to make greater investments in safety and delivery. Referencing Resolution #1 above, AI could even support utilities' vegetation management operations, using images from satellite technology to train models and predict patterns in current vegetation-induced outages. Smarter approaches to vegetation management—such as the use of micro-trenching of power lines and other undergrounding techniques—will prevent future disasters spurred by climate change.

Utilities must be open to exploring PBR but also be prepared and ready to engage with regulators with constructive pushback when necessary.

7. PREPARE FOR PERFORMANCE-BASED RATEMAKING (PBR) REGULATIONS

Utility regulation and stakeholder activism pushes in many directions. Reform efforts are increasingly directed at how to amend and modify the incentive structures under which utilities operate. PBR is built on the fair and operative premise, which considers that if the incentive structures are smartly enhanced, this unlocks the ability to secure the beneficial outcomes sought from new state-level policy interventions. Unlike traditional rate-making mechanisms, PBR aligns utility revenues and return on investment (ROI) to specific performance goals. However, there are many questions that remain unanswered. Is the problem with an outdated incentive structure? Is it a lack of perspective, or willingness, to address core tradeoffs involving scarce financial and human capital? Is it due to pursuing too many aggressive policy—and at times divergent—goals? Utilities must be open to exploring PBR but also be prepared and ready to engage with regulators with constructive pushback when necessary.

[3] Levitt, Z., & Shao, E. (2023, October 8). Where this summer was relentlessly hot. *The New York Times*. Retrieved from https://nyti.ms/3Mw0egn

8. LOCALIZE GRID PLANNING TO INCREASE PERFORMANCE

Insurance companies in recent years have begun discontinuing property coverage in high-risk areas. Utility grid planners do not have this option and must adhere to the obligation to serve even when an area along a coast or elsewhere feels the impact of a hurricane or other natural disaster. However, repairing the electricity grid, shoring up with a microgrid, or other storm resilience investments is a societal cost that every rate payer will have to assume. Grid planning has become insurmountably difficult when the only viable option is to build, build, and rebuild in hard-hit areas. In the interest of serving that obligation, making the correct decision on how to invest is critical to long-term success. Tough decisions lie ahead on how best to invest, how best to motivate individual responsibility, and the role of a modern, flexible grid to mitigate an uncertain future and still have an equitable grid.

Tough decisions lie ahead on how best to invest, how best to motivate individual responsibility, and the role of a modern, flexible grid to mitigate an uncertain future and still have an equitable grid.

9. INVEST IN PHYSICAL AND CYBER SECURITY

Securing critical infrastructure is a chief concern for utilities, along with the rest of the world. Transportation Security Administration (TSA) guidelines[4] and federal protections around cybersecurity can only go so far and require downstream actions. Given the anticipated geo-political climate in 2024, it is imperative that utility leadership and regulatory staff support and enable the next-generation workers and systems to serve on the frontline. Investment around network isolation and separation, pen tests, table-top exercises and simulators—both physical and cyber—should increase in frequency to protect our nation's critical utility infrastructure.

[4] Transportation Security Administration. (2022, July 21). *TSA revises and reissues cybersecurity requirements for pipeline owners and operators*. Retrieved from https://bit.ly/3QgBNVk

10. OVERCOME SUPPLY-CHAIN CHALLENGES WITH EMERGING STANDARDS

Supply chains remain a collective challenge, so the industry must act collectively to standardize and streamline equipment to reduce the high variability and customizations required to meet a local utility's needs. According to DOE,[5] a large bottleneck in transformer production is due to the choice of materials used, limited skilled workers, few manufacturers, and most of all high variability in utility-by-utility functional specification requirements that artificially suppress transformer production. This reality is seen across the board for many goods in the energy industry. Potential solutions—such as alternative materials, reductions in tailored designs, and harvesting old utility equipment to repair and recycle—call for utility leadership to coordinate and solve this problem once and for all. With widespread coordination there is the potential to break the supply-chain's grip on many commodities that have been manufactured the same for decades.

Whether sitting in the executive suite or in a bucket truck, utility personnel are facing some of the greatest challenges of their career.

CONCLUSION

Whether sitting in the executive suite or in a bucket truck, utility personnel are facing some of the greatest challenges of their career. Extreme weather events, bad actors, rising energy costs, equipment and people shortages, and a slew of emerging issues wait around the corner. At the same time, the financial resources available, regulatory approval, and a public desire to modernize, transform, and reinvent our energy system remains a collective goal for the United States and offers hope for the future. Everyone in the industry is looking forward to seeing what is possible in the coming year.

[5] Rodriques, G. (September 2023). *Keynote speech at EEI Conference in Orlando*. Department of Energy.

