Key Themes Driving Electric Utility Operations Today

New Ways of Thinking

By AEIC's Elizabeth Cook

Rapid and seismic change in the electric industry is no longer something we can see on the horizon for which we need to start planning. It's happening. Right now. Executives and operations leaders at electric utilities are experiencing it in real time each and every day.

So, let's not call it change anymore. Let's think of it as simply the current dynamic state of the industry.

I spent a significant amount of time over the past year engaging with these leaders at AEIC's member utilities throughout the country who are embracing new ways of thinking, not bound by outdated business models or legacy systems, to design and implement solutions to key challenges and to capitalize on emerging opportunities in this dynamic environment.

Through this work, eight themes have emerged that I consider essential to achieving successful, leading-edge utility operations in 2026 and beyond:

Integrated Planning as the Core Utility Competency

Given multi-directional energy flow and resource uncertainty, integrated planning is no longer optional. System planning and asset management alignment are critical to success. This includes having forecasting capabilities for inverter-based resources (IBR) and customer interactive grid programs and coordination between distribution and transmission. We must use planning to close gaps in data governance and operations and model for uncertainty rather than precision.

The Era of Operational Truth: Data as the Source of Alignment

Industry leaders understand that transformation cannot happen until operational data is trusted, clean, connected, and taught in a consistent way. Data governance should originate in real operations rather than policy offices and data-readiness should be grounded in processes, not tools. The utilities leading the way are creating environments where 8760 forecasting culture replaces peak-only thinking and where digital twins reflect reality rather than aspiration.

Resilience Over Reliability

Regulators and customers no longer accept blue-sky metrics that erase the chaos of storms. The industry is shifting to resilience as the benchmark. To achieve resilience, storm planning must be an enterprise capability, not a department function. Utilities are making investments in hardening grid infrastructure that include measurable risk-reduction outputs and developing probabilistic risk frameworks that include "black-swan" events. In addition, vegetation management approaches are being modernized to include predictive analytics, and more

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attention is being given to customer preparedness and community-level resilience hubs.

High-Velocity Load Growth and End of Business as Usual

Load growth curves have broken historic assumptions. Data centers, electrification, IBR, and increased manufacturing relocation have changed every planning assumption. New planning models are being developed to ensure rightsizing versus oversizing infrastructure in the current volatile growth environment. Utilities are adapting to the new fast cycle for interconnections and developing cross-functional intake approaches for large customer requests. To meet the needs of new market entrants, utilities are developing innovative partnership models while also managing the dynamic workforce requirements needed to execute accelerated load expansion.

Grid Enhancing Technologies and Rise of Non-Wires Operational Assets

Transmission bottlenecks, supply-chain delays, and workforce shortages are forcing utilities to maximize existing assets. Shifting from a build more to an operate smarter mindset includes new capabilities for real-time situation awareness and predictive analytics for load relief such as dynamic line ratings, topology optimization, and power flow controllers.

Customer-Centric Energy Futures

Customers now anchor the narrative. Traditional industrial, commercial, municipal, and residential customers all have expectations for zero downtime while new load types such as micro-data centers, EV fleets, AI labs are driving unprecedented demand growth. In response, utilities are developing new approaches to customer engagement through community energy districts, transparent dashboards for customer engagement, and trust-building communications during major events.

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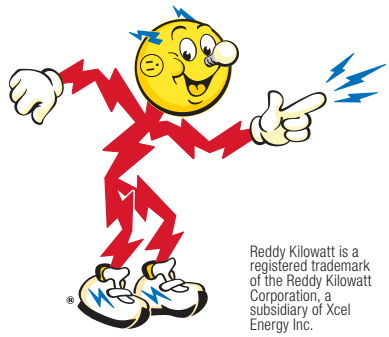
Workforce Transformation

To address the talent cliff currently faced by all utilities, the AEIC Center for Operational Excellence is modeling the new operating system for utilities of people, practice, and process. With training, development, and safety at the strategic core, we are documenting work method best practices, applying crew-centric design language in tools and processes, and removing friction from daily work. In addition, we are embedding the stoic leadership principles of clarity, discipline, equanimity, and responsibility throughout the process.

Operational Excellence as Common Language Across Departments

Fragmentation within utilities prevents progress more than any technical gap. To address this challenge, utilities must embed continuous assessment and improvement into their culture. Some of the ways in which leading utilities are addressing fragmentation include end-to-end process mapping and elimination of redundant workflows, standardized documentation and knowledge transfer, failure mode analysis applied to data, systems, and people, and new strategies for workload compression and burnout prevention.

Throughout 2026, AEIC and the AEIC Center for Operational Excellence will tackle these themes through the collaborative work of our member-led committees comprised of more than five hundred operations leaders from utilities across the country and through a robust schedule of in-person and virtual workshops, critical action forums, training events, and publications. I invite you to learn more by visiting the AEIC website: https://aeic.org/ and https://aeicopscenter.org/. PUF



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