7 electric utility industry trends to watch in 2018
2017 delivered on the promise of a wild year once President Donald Trump took office. With all bets off, his administration sought to transform the power sector and stem coal plant retirements with its fossil-fuel friendly agenda.

Phrases like “resilient” and “energy dominance” have risen in the power sector’s lexicon, driven in large part by efforts of the Energy Department and the Federal Energy Regulatory Commission (FERC) to redefine a reliable grid. That, paired with a spate of devastating hurricanes, a new tax code and a controversial solar trade case will define the sector in 2018.

Even so, industry thought leaders expect to see state-driven policy and an appetite for renewable energy to continue.

Last year, we asked readers and sector experts to give us some predictions on where they see the sector heading. This year, we are bringing back those popular pieces, with insight ranging from former FERC commissioners to trade group leaders.
1. “Resilience” will be defined – Andrew Ott, CEO of PJM Interconnection

I think we can all agree that 2017 was a year of change and challenge in the electricity industry. We saw electric grids compromised by hurricanes and extreme weather events while authorities cautioned against the dangers of cyberattacks.

In addition, we saw the challenges to the electricity markets by the Department of Energy in the name of resilience. In 2018, the overarching themes of grid reliability, security and resilience will continue to drive electric industry initiatives. However, we in the electric industry need to do a better job of making the meaning of “resilience” clear to our regulators and to others in the industry.

Resilience is not reliability. Resilience goes beyond reliability to keep the grid functioning and to recover quickly, no matter what the cause of the event. In 2018, it will be time to move from concept to concrete steps: The electric transmission and natural gas transportation systems will find ways to coordinate the planning, preparation and operation of their interdependent infrastructures.

The industry will find ways to bridge the economic view of aging power plants and the societal view of electricity resources as sources of community benefits such as taxes and jobs. The industry will be judicious in making decisions about power supply shifts such that they reinforce resilience. Planners will look at transmission infrastructure from a perspective of improving resilience.

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Partially in response to those challenges, the industry will find ways to integrate microgrids and other distributed energy resources onto the grid. That will allow those resources to contribute and the industry and society to capitalize on the enormous opportunities that they present. With the growing awareness of threats to the grid – both cyber and physical – has come a growing awareness of resilience. I expect 2018 to be the year the electricity industry clarifies the term resilience, recognizes its regional aspects and focuses on ways to advance resilience initiatives.

2. **Residential consumers will take more control over energy usage — Sue Kelly, President of the American Public Power Association**

In 2018, the retail customers of electric utilities will continue to adopt new ways of living and using electricity. Residential customers will increasingly use technology to control their electric usage. More industrial and commercial customers will demand clean energy supplies to meet corporate sustainability goals.

Many utilities will see flat or even declining load growth because of increased energy efficiency and demand response. Even if their customer counts increase, their loads may not. But on the flip side, electricity consumption could increase due to new uses such as transportation and even heating. We have to be ready for both scenarios.

Community-owned, not-for-profit public power utilities are well-positioned to respond to these changes, as we are answerable to our communities and not to remote shareholders. But we need to capitalize on our strengths. We can no longer stay in our comfort zone on our side of the meter — providing basic
electric service and sending bills. We must diversify the menu, develop new rate designs to handle increased demands on our distribution grids, adapt to changing customer preferences, and prove we can be our customers’ trusted energy advisors.

As for what will keep me up at night in 2018, it will be cyber and physical security concerns. These threats will loom ever larger and no utility, large or small, will be immune. We in the electric utility industry will have to work even more closely with each other, our government partners, and other industry sectors to mitigate our risks and recover quickly if we do experience an event. We are making improvements to stay a step ahead of our adversaries, but we cannot underestimate their ever-expanding capabilities.

3. NOPR dominates — Ray Gifford and Matt Larson, lawyers with the Wilkinson Barker Knauer law firm

The DOE NOPR continues to dominate the early half of 2018 and spawn new proposals like the PJM real-time, 30-minute operating reserve product proposal in the other Restructured Administrative Markets (RAMM), i.e., NE-ISO and NYISO.

Market instrumentalists despair and continue to push the notion that NOPR-like proposals, so long as they aid coal, will lead to the death of electricity markets. Meanwhile, the pressures to engineer and manipulate the price system in RAMM will be irresistible because of several reasons: reliability issues are real, at some level, depending on local circumstances; the political economy of power plant closures at a local and state level is underappreciated; and – at a meta-level – institutions susceptible to rentseeking will draw rentseekers.

State legislative sessions kick into gear and we see an "around market" renaissance, with the ZEC playbook in full effect in New Jersey, Pennsylvania, Connecticut and perhaps other states. If courts continue to show solicitude toward state ‘around market’ actions, expect those actions to proliferate.
Watch ERCOT for coal retirements and combined cycle gas generator bankruptcies. In addition, the general illness of the RAMM makes it the perfect proving ground for whether the RAMM is salvageable. As major new quantities of full PTC-rush wind come online, the issues of negative pricing and higher fixed cost generators being unable to cover costs will become severe. Pressures to adopt a capacity market will thus increase. But, as PJM has shown, this salve may be inadequate and then cost-of-service measures enter the conversation.

Finally, the Clean Power Plan – edited by Administrator Pruitt to Version 2 – returns and new battle lines are drawn, with proponents and opponents flipped given anticipated changes in Version 2.

4. Electric economics will favor clean energy — Sonia Aggarwal, Vice President of Energy Innovation

The economics of electricity generation have flipped from coal to clean, and this trend will reshape America’s utility industry in 2018. Utilities nationwide are choosing to close coal and expand renewable energy because of how much the switch improves their bottom lines and lowers their customers’ bills.

PNM’s 2017-2023 IRP targets zero coal by 2031, Xcel released a plan to make 85 percent of its Minnesota power mix carbon-free by 2030, Ameren is investing $1 billion in renewables to cut emissions 80 percent by 2050, while We Energies will close a 1.2 gigawatt coal plant in 2018 and partially replace it with Wisconsin’s largest solar array.
Dozens of other coal closure announcements happened in 2017 because wind, solar and storage prices are on a solid downward trend while the costs of other power generation technologies stay flat.

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This momentum is promising because the federal government can only do so much tinkering with power markets – when wholesale markets are left alone, like in Texas, renewables beat coal on cost. Federal efforts may delay coal closure announcements in 2018, but these delays come at the expense of utility customers, and I expect similar utility decisions to continue based on market fundamentals. Although the particulars of the proposed grid-resiliency rule remain uncertain, a likely outcome is a renewed push for price formation reforms. The new Federal Energy Regulatory Commission leadership could pursue constructive market reforms, such as in marginal-cost and scarcity pricing. Expanding price formation into unconventional territory like resilience and capacity markets could markedly alter competitive relationships among generators and increase costs to consumers.

5. **Price formation will be a flashpoint** — Devin Hartman, electricity policy manager and senior fellow at R Street Institute

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A major debate is whether to include commitment costs in energy prices. Allowing prices to reflect commitment costs for fast-start resources divided leading economists, who tend to oppose doing so for long-lead units like baseload plants, as that requires very liberal interpretation of marginal cost. We’ve already seen FERC rescind the fast-start pricing NOPR and pivot to ISO-specific investigations and PJM shift to fast-start resources over baseload plants in its price formation effort.

But there are at least a dozen other areas for price formation reform, most notably those related to scarcity pricing. Market monitors and key stakeholders in ISOs with high merchant membership support reforms for more robust and locational scarcity pricing. This is already under the microscope in ERCOT and should rise on FERC’s radar. We nonetheless expect continued political calls to bail out legacy plants, as reasonable price formation reforms will not pull many of these unnecessary units back in the money.
6. Natural gas will continue to dominate – Richard Meyer, director of energy analysis for the American Gas Association

U.S. natural gas production will again astound in 2018 as continued drilling and new pipeline capacity connects supplies to demand centers.

Utilization may reach all-time highs as well, as end-use and exports grow. January 1 already set a new single-day record for U.S. natural gas consumption. In addition to the Cove Point terminal in Maryland, we are likely to see two or three more liquefied natural gas (LNG) export terminals come online in 2018. Feedgas for LNG export will help absorb growing supplies.

Exports to Mexico may grow slowly as 2018 begins, but the latter half of the year may bring online new large projects, such as the Sur de Texas pipeline, and boost demand.

New plants that use natural gas to generate electricity will be built this year in the U.S. with 20 gigawatts or more of capacity possibly coming online. New capacity of renewable electricity, mostly solar and wind, will likely be strong as well.

At the same time, more than 13 gigawatts of conventional steam coal capacity is set to retire in 2018, more than double the amount from last year.

EIA projects natural gas prices at Henry Hub to average $3.24/MMBtu in 2018. Overall, the U.S. demand elements are bullish. Production is bearish. Hard to say which might win out. But I’ll note that production continues to surprise everyone.
7. Tax reform, legal battles will dog power sector — Alex Gilbert, cofounder of SparkLibrary

In 2018, key policy trends will accelerate, tax reform will dominate the sector, and new implications of the U.S. energy boom will emerge as the U.S. becomes a net energy exporter.

The renewable sector dodged a bullet when it survived tax reform. An extenders package is shaping up for early 2018. However, the ITC trade remedy is expected soon. Despite this political uncertainty, the solar boom will continue, spreading to new SW states and Texas this year.

As the EPA deregulatory push enters its second year, legal and regulatory battles will escalate. A CPP replacement is unlikely until the [second half] of 2018 but the fates of other regulatory rollbacks could be decided in court.

In the next several months, the utility sector will be dominated by the successful passage of the GOP tax reform package. Multiple state PUCs have already expressed interest in ensuring that tax benefits accrue to ratepayers, not just utilities. Expect an increased number of rate cases.

Booming natural gas demand and exports are likely to keep natural gas and power prices away from decadal lows.

Nevertheless, they will remain low, with continued coal retirements and pressure on nuclear units. The DOE/FERC NOPR is unlikely to be enacted as written; however, 2018 could be the year of resilience at FERC, especially as cyber’s importance continues to grow.
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