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## Navigating the year ahead

Energy and resources

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**REGULATORY  
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This publication is part of the Deloitte Center for Regulatory Strategy, Americas' cross-industry series on the year's top regulatory trends. This annual series provides a forward look at some of the regulatory issues we anticipate will have a significant impact on the market and our clients' businesses in 2018. The issues outlined in each of the reports provide a starting point for an important dialogue about future regulatory challenges and opportunities to help executives stay ahead of evolving requirements and trends. For 2018, we provide our regulatory perspectives on the following industries and sectors: banking, securities, insurance, investment management, energy and resources, life sciences, and health care.

We hope you find this document to be helpful as you plan for 2018 and the regulatory changes it may bring. Please feel free to contact us with questions and feedback at [CenterRegulatoryStrategyAmericas@deloitte.com](mailto:CenterRegulatoryStrategyAmericas@deloitte.com).

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# Introduction

Most energy companies are forging ahead with their risk and compliance initiatives even as regulatory uncertainty will likely remain a significant and ongoing challenge. Even if lawmakers and regulators make certain definitive changes, energy companies should continue to drive effectiveness and efficiency of their compliance programs so they meet applicable laws, regulations, and supervisory expectations. And in most cases, they don't have the time or luxury of waiting to see how things will shake out. Thankfully, many of the changes energy companies are making to achieve compliance are useful improvements that are worth doing from a risk and business perspective.

Here's a look at some key regulatory trends that companies in the energy industry will likely need to monitor and address in 2018. By embracing regulatory complexity in 2018, organizations can accelerate performance and stay ahead of changes so that they can more effectively navigate the regulatory landscape.

To stay on top of the latest regulatory news, trends, and insights, we invite you to visit our website at [www.deloitte.com/us/about-dcrsamericas](http://www.deloitte.com/us/about-dcrsamericas).







# Price reporting



Price reporting continues to be of interest to regulators and market participants alike. Regulators want transaction price information because of the implications for price formation and market visibility. Market participants want the information because it gives them a sense of how their business is contributing to and/or shaping the market at different trading locations. It also gives them a barometer for evaluating their own trading activities relative to the market.

Lingering concerns include the challenge of establishing and overseeing a price reporting program, as well as how regulators will use the data.

Discussions over the past 12 months have focused on alternative ways to capture and share price information that could make it easier to establish such a program and ensure the integrity and timeliness of the data being reported. Safe harbor rules notwithstanding, there are strong arguments and opinions on both sides

about whether price reporting should be done—and how it should be handled. We expect that, in 2018, regulators and the industry will likely build on discussions and insights from regulator-led technical conferences and may establish a new or modified prototype for capturing price transaction data.

In addition, there are solutions coming to markets that have price reporting agencies cooperating with electronic exchanges where data from applicable transactions may directly be added to the index creation model. Individual company reporting is still necessary to complete these calculations, so we don't see these new offerings replacing the need for reporting. The resulting model will likely be less burdensome for stakeholders to support and easier for compliance functions or middle offices to oversee.

At many companies, there's an ongoing internal debate about price reporting.

Typically, commercial teams want to start (or continue) reporting transaction prices in order to get a better understanding of the depth and pricing of particular trading locations. In spirit, the compliance function and middle office teams are generally comfortable accommodating this request from the front office. But, they want to ensure that the necessary systems, processes, training, controls, and guidance materials are all in place to support the integrity of the reporting activity. These differing priorities can create a bit of a tug-of-war.

The steps regulators are taking to earnestly examine the issue of price reporting—and how to enable it—will likely help bridge the gap between the front and middle office. In the meantime, exchanges, price reporting agencies, and market participants will continue working through the issues, and we expect a new model to be put forth by the end of 2018.



# Leadership update for the CFTC and FERC

It's hoped that 2018 will see both commissions restored to their full strength of five commissioners in order to deal efficiently with the complex regulatory issues in our industry.

In the wake of the 2016 presidential election, 2018 will be a time of transition at both the Commodities Future Trading Commission (CFTC) and the Federal Energy Regulatory Commission (FERC). Under the new administration, new chairmen have been nominated and confirmed, some commissioners have departed before their terms expired, and new commissioners are joining or being confirmed.

It's hoped that 2018 will see both commissions restored to their full strength of five commissioners in order to deal efficiently with the industry's complex regulatory issues.

## At the CFTC

In August 2017, the US Senate confirmed Commissioner J. Giancarlo as Chairman. Giancarlo was originally nominated to the commission by President Obama in 2013 and was

subsequently nominated by the current administration to serve as chairman for a term that expires in April 2019.

Commissioner Sharon Bowen recently left the CFTC. She reflected on her time as a commissioner in a recent farewell address at the Institute of International Economic Law at the Georgetown University Law Center.<sup>1</sup> In that speech, she praised the CFTC for expanding the clearing of derivatives, improving international cooperation in enforcement, and advancing data harmonization. She also praised the creation of the CFTC's Market Risk Advisory Committee. She noted, however, that the Commission had unfinished business in cybersecurity, high-frequency trading, and governance rules for clearinghouses and trading platforms.

The Senate also confirmed two new Commissioners in August 2017. Commissioner Brian D. Quintenz was confirmed for a five-year

term, which expires in April 2020, and Commissioner Rostin Behnam was confirmed for a term that expires in June 2021. With the departure of Commissioner Bowen, this will leave two open seats on the commission. President Trump also nominated Dawn Stump to serve as a CFTC Commissioner for a term expiring in April 2022. Her nomination remains pending before the Senate.

Commissioner Quintenz worked for Congresswoman Deborah Pryce from 2001 to 2007, starting as a staff assistant and eventually becoming a senior policy adviser. He began his career in finance at Hill-Townsend Capital, where he performed valuation analysis on regional and global banks and implemented proprietary hedging strategies. In 2013, he founded Saeculum Capital Management, an investment firm. In March 2016, he was nominated by President Obama to be a commissioner on the CFTC, but his nomination was not voted on before Congress ended its session for the year.

Commissioner Behnam served as senior counsel to Senator Debbie Stabenow,

starting as counsel in 2011 and focusing on policy and legislation related to the CFTC. He has practiced law in New York City and worked in the New Jersey Office of the attorney general.

James MacDonald, the new director of the Division of Enforcement at the CFTC, recently gave a speech at the NYU Program on Corporate Compliance & Enforcement<sup>2</sup> where he outlined a new program for cooperation and self-reporting. As an incentive to cooperate with the CFTC's enforcement efforts, the new program aims to provide milder penalties for firms that cooperate with the CFTC and self-report infractions.

In 2018, the CFTC's focus will likely include continued work on position limits, ongoing work on streamlining current and pending regulation, and consideration of additional hedge exemptions. CFTC is also a leading force behind the adaption of digital strategies to regulate in a more efficient and transparent manner. Expect a number of announcements in this area through 2018.

#### At the FERC

Chairman Neil Chatterjee was nominated to the commission in May 2017 and confirmed in August 2017. Prior to joining the FERC, he was energy policy adviser to US Senate Majority Leader Mitch McConnell. Chatterjee previously worked for the Ways and Means Committee, the National Rural Electric Cooperative Association, and for House Republican Conference Chairwoman Deborah Pryce.

In a news release shortly after his confirmation, Chairman Chatterjee praised the previous chairman, Commissioner Cheryl LaFleur, for her leadership during the transition. He noted that Chairman LaFleur guided the agency through an unprecedented period where there was no quorum, since the Commission was down to only two commissioners. He also noted that his chairmanship might be temporary, pending the confirmation of Kevin McIntyre<sup>3</sup> (see below).

Commissioner Robert F. Powelson was nominated and confirmed with Chairman Chatterjee. He has served on the Pennsylvania Public Utility Commission since June 2008 and led the Pennsylvania Public Utility Commission as chairman from February 2011 to May 2015. He is also a past president of the National Association of Regulatory Utility Commissioners and has served on the board of directors of the Electric Power Research Institute.

Two FERC nominees are awaiting confirmation: Kevin McIntyre and Rich Glick. On September 7, 2017, both appeared

before FERC to give testimony on their nominations.<sup>4</sup>

Kevin McIntyre is co-head of the global energy practice at Jones Day. He has been with Jones Day for more than 18 years.

Rich Glick was a Legislative Director and Chief Counsel for Senator Bumpers, and he worked on several provisions of the Energy Policy Act of 1992. Also, he was also a Senior Policy Advisor to Energy Secretary Bill Richardson during the "western energy crisis." He later worked for PacifiCorp, as well as the firm now known as Avangrid.

In 2018, FERC will likely continue to focus on price reporting, overall industry outreach as FERC becomes proactive to visit with market participants to get their insight, and market enforcement to protect the public from market manipulation.







# Market/trade surveillance and data collection

Each of these overseeing bodies has made significant investments in automated monitoring, including off-the-shelf technologies commercially available to trading organizations.

Trade surveillance is the active monitoring of transactions throughout all facets of a portfolio, including physical, financial, and bilateral market activities across all energy commodities. Companies perform either manual or automated reviews that focus on detecting patterns of concern as understood from direct or indirect regulatory guidance.

A focus on trade surveillance in the energy commodity markets has continued despite uncertainty in the direction of US regulations on this topic. Globally, other regulators are increasing their oversight and prescribing additional requirements, helping to keep the interest of US market participants relatively stable. Organizations with a global trading footprint are continuing to build out capabilities to meet the demands of new requirements coming online in the near term (e.g., MIFID II going live in January 2018<sup>5</sup>).

Furthermore, the evolving participation of exchanges and power system operators as bodies of oversight has created another layer of surveillance responsibility for organizations to manage. Each of these overseeing bodies has made significant investments in automated monitoring, including off-the-shelf technologies commercially available to trading organizations.

For example, the Intercontinental Exchange has publicly disclosed its use of the NASDAQ Smarts technology to perform automated monitoring of all trading done on its platform. This type of investment is driving market adoption as trading organizations seek to perform comparable reviews and disclose the commercial purpose of trades that may signal concern to outside parties when taken out of context.

Many commercial trading organizations have historically had limited budgets and small

teams to support active trade surveillance programs. This has made it difficult for them to establish dynamic trade monitoring and surveillance activities. Leadership at these organizations has realized the increasing importance of trade surveillance and sponsored formal reviews of current programs to evaluate their current state and help map their compliance risk profiles.

For many, this has led to extended investments into automated surveillance of both structured data (e.g., algorithmic alerts) and unstructured data (e.g., e-commerce monitoring). In our experience, roughly half of trading organizations are designing and building these applications in-house, while the other half are licensing commercial technologies.

Either way, a centralized data repository dedicated to trade surveillance has become a leading practice since existing data frequently isn't tailored to the requirements

for trade surveillance. This is often because trades are aggregated for market or credit risk monitoring requirements. But sometimes it's because separate books are kept for different trading strategies. This disaggregation or joining is a critical feature for effective trade surveillance programs. These central repositories have also become useful tools to help further democratize trading data across the trade life cycle, as they are designed for high usability and often are joined together with advanced data visualization tools.

Moving forward, here are some key steps to consider:

- Perform an assessment of current practices to validate effectiveness in preventing compliance risks
- Develop a risk register that prioritizes risks and profiles requirements across the portfolio, as driven by overseeing bodies
- Build a road map that rightsizes the solution, factoring in existing technology investments and off-the-shelf solutions

In 2018, the CFTC and FERC will likely be reaching out to commodity market participants so that they may shape future regulations to fit what the market needs. These agencies will also be looking at existing regulation to assess its current applicability.



# Operational integrity and safety



The power and utilities (P&U) asset base is stressed due to aging infrastructure; growth in customer demand; and impacts from innovation in competing areas, such as solar and distributed energy resources. Meanwhile, increased scrutiny from state and federal regulators (e.g., FERC, Pipeline and Hazardous Materials Safety Administration (PHMSA), and state public utility commissions (PUCs)) continues to drive a need to revisit asset management protocols that are significantly dated, despite evidence that analytical approaches are beneficial and more efficient.

Subject matter expertise has long been the critical factor in determining how to prioritize asset risk. Now, with an aging workforce and one of the highest attrition rates that the P&U industry has ever seen, there's growing concern that significant failures could begin to happen with increasing frequency. One high focus area is our nation's gas distribution system, which has the greatest potential for major impact, as well as significant room for improvement based on historical practices.

System failures—such as the San Bruno and East Harlem gas explosions and the Porter Ranch gas leak near Los Angeles—have resulted in the loss of life, damage to property, environmental harm, and increased scrutiny from industry regulators. This has catalyzed prescriptive programs that are enforcing accelerated replacement activities. States with major events are ahead of the pack.

For example, California's SB 1371 program requires targeted pipeline and infrastructure replacement programs for improving public safety and methane emissions. The California PUC has also prescribed the use of empirical data to prioritize asset replacement, a major step forward in modernizing the approach around asset risk management.

Other recent examples include the issuance of an order by the Kansas Corporation Commission to accelerate replacement of aging pipe over the next four years in what they have termed an Accelerated Replacement Program (ARP). Following a gas pipeline explosion in Colorado earlier this year, the Colorado Oil and Gas Conservation Commission ordered tests that showed failures on .35 percent of the approximately 120,000 lines in close proximity to populated areas, with 13,000 lines returning uncertain results. This has set in motion a rewrite of flow line regulations by the Colorado commission. Many other examples are popping up across the nation and in federal regulations.

These regulatory changes are all focused on improving the protocols, systems, and decision-making practices for managing these assets, emphasizing safety as a top priority. This is driving increased requirements to improve programmatic approaches to asset life-cycle activities, with a specific emphasis on leveraging rigorous protocols used in other infrastructure-heavy industries, such as those detailed by the ISO 55000 standard.

## Once consolidated, companies can use the data to create real-time visualizations and advanced analytics technologies such as machine learning to help predict failures and improve prioritization of replacement activities.

Other focus areas include increased use of operation and information technology, such as advanced sensors, in-line robots/smart pigs, and automated leak detection tools. Enablers that allow for advanced control operations, such as automated or remote shut-off valves, are also being used to help preclude catastrophes.

Recent events have perhaps most significantly highlighted the poor use of information management systems that could help consolidate data across multiple systems. Once consolidated, companies can use the data to create real-time visualizations and advanced analytics technologies, such as machine learning, to help predict failures and improve prioritization of replacement activities.

Although data is currently collected and available from energy operations, the form and structure of this data often makes it very difficult to apply analytical approaches.

In addition, regulators are increasingly requiring supplements to traditional usage-based thinking in order to improve infrastructure reliability, safety, and environmental risk-based decision-making approaches.

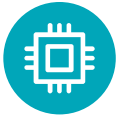
Companies are instituting aggressive programs for operational integrity and safety for a variety of reasons, including regulatory mandates, safety concerns, and the threat of fines, which have ranged from multiple millions of dollars to more than a billion dollars.

Here are some steps companies can consider to get ahead of the problem:

- Perform a detailed assessment to identify asset management program improvements that align with the latest standards
- Identify, categorize, and collect relevant operational data
- Predict critical failure types and locations to improve operations, maintenance, and capital investments
- Create a risk-based priority roadmap to strategically align asset investment plans with business strategy







# Innovation

Innovation in this context refers to the use of any digital technology that disrupts the legacy systems and processes that have traditionally been used to perform operational tasks in the energy and resources sector. Industry participants are discovering opportunities to increase efficiency in almost every aspect of the business by using such technologies as robotic process automation (RPA), artificial intelligence (AI), and blockchain.

The energy industry has been a bit slow to embrace innovation but is now rushing to develop innovative technologies that improve how companies operate. Businesses are making great strides in adopting these technologies, either alone or by joining major consortiums. Implementation of these technologies is also standardizing the way energy firms interact with each other, with their regulators, and with their banks. In addition, deploying these technologies is increasing the speed of data flow, improving data and process efficiency, and increasing the security of data as it travels between participating parties.

One reason the energy industry is embracing these technologies now is because it has been suffering through a prolonged period of low commodity prices. This economic environment has forced firms to cut costs and improve efficiencies to “do more with less.” In today’s energy industry, innovation isn’t something that’s just being conceptualized; it’s actually happening.

Manual spreadsheets containing tens of thousands of lines of data that traditionally required much effort and time to reconcile are being handled with RPA in a matter of

minutes. Retail call centers are using AI to improve the quality and efficiency of their customer experience, helping companies retain and grow market share. And data from those transformed processes and client interactions is now being distributed both internally and externally using the efficiency, speed, and security of blockchain technology.

These innovations are shaping the future of the industry. Consortiums are being created, proofs of concept are scaling into full production, and standards are being set. A firm that chooses not to participate in these innovative efforts could find itself forced to follow someone else’s standards—rather than taking the lead and helping define the new standards.

Of course, with innovation comes a number of internal and external challenges. Innovation means change, and change usually means an uncertain future. To prepare for this future, a firm should try to quantify the cost, time, personnel, and value proposition required to fully adopt the innovation. Innovation may also require retraining staff and changing processes that have been in place for years or decades.

This change can create risk if not managed correctly. To avoid business disruption, companies need a carefully prepared change management plan that addresses the obstacles and risks.

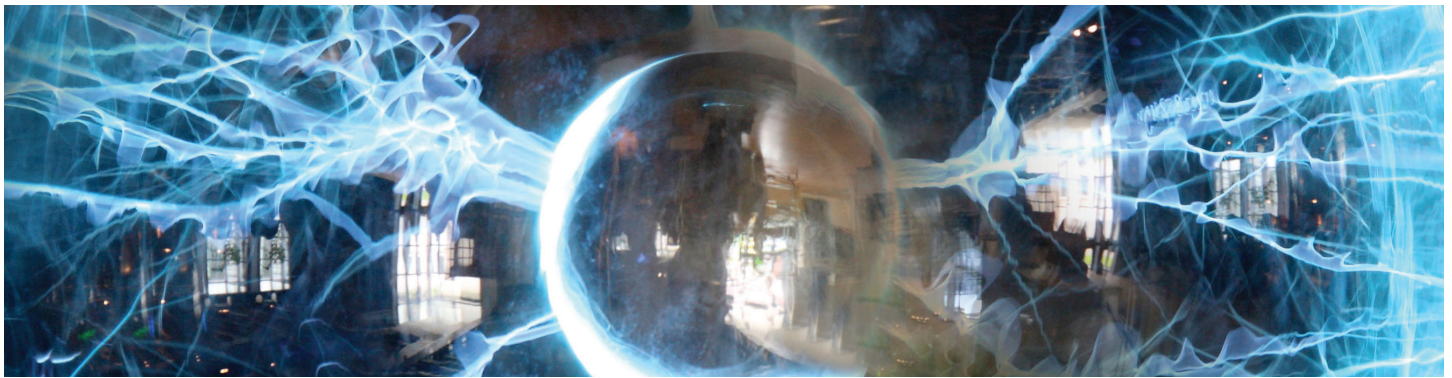
Other key steps to consider include:

- Focusing innovation on a specific pain point or business goal
- Surveying the industry to benchmark the firm’s current state and expected future state
- Rightsizing an innovation plan to fit the firm’s capacity and risk tolerance
- Clearly communicating the innovation plan to key stakeholders within the firm and getting early buy-in
- Developing a long-term plan to be executed once the first initiative is complete

If executed correctly, innovation can deliver a steady and almost immediate cadence of wins. Also, many innovation plans are expanded as the innovations prove their worth, delivering greater than expected benefits and helping a company establish itself as an industry leader.

To prepare for this future, a firm must try to quantify the cost, time, personnel, and value proposition required to fully adopt the innovation.

# North American Electric Reliability Corporation (NERC) trends



Electric grid reliability remains a strong focus for regulators. And we're now seeing extra emphasis on cybersecurity, particularly from FERC, which is the parent regulator to NERC.

Here are a few key trends and issues to be aware of:

**FERC regulation of NERC.** Over the past year, we have seen FERC increase its NERC-related focus on three levels:

- NERC's role as a regulator
- NERC's enforcement activities
- Entity compliance with NERC regulations and cybersecurity rules

FERC has participated in a growing number of NERC audits and has actively initiated FERC audits of compliance by entities subject to NERC critical infrastructure protection (CIP) (i.e., cybersecurity) regulations. On October 6, 2017, FERC issued a staff report on lessons learned<sup>6</sup> from its CIP audits. All this activity signals a

continued and increasing interest from FERC in compliance with cybersecurity regulations, as well as a likely increase in FERC's role in this area, both for enforcement and rulemaking.

**Third-party vendor/supply chain.** NERC has begun adopting the proposed supply chain standards and implementation plans<sup>7</sup> to ensure that the industry puts an appropriate level of effort into securing supply chains and mitigating risks associated with assets and activities touched by third parties prior to integration into the utility environment.

**Cross-border collaboration.** Over the past couple of years, NERC has focused heavily on supporting a more collaborative and integrated approach to reliability with both Canada and Mexico. While Canada adopted the NERC standards as part of the early paradigm, Mexico has recently been working to build out a more formal regulatory infrastructure while simultaneously developing its physical infrastructure.

NERC and its board of trustees have worked closely with Mexican leadership to support these efforts with an understanding that Mexico's efforts are critical to long-term reliability in the US as well. At an NERC board of trustees meeting on October 10, 2017, NERC President and CEO Gerry Cauley said, "We are part of an opportunity that is building a foundation of reliability and security across three countries—United States, Canada, and Mexico. Our relationships are fundamental and essential to the strength of NERC and to the good of our nations' reliability and security."

**The role of reliability in generation source debates.** With the current administration focusing heavily on the use of coal and nuclear generation sources for power, we expect reliability to be a key issue in the debate over which resources are best for the nation's long-term energy strategy.<sup>8</sup> Meanwhile, NERC is working with the Institute of Electrical and Electronics Engineers (IEEE) Power and Energy Society (PES) to assess the reliability impact of renewable resources.

## The bottom line is that any entity operating within the power & utility space needs to pay close attention to NERC as a regulator, and to which areas on which NERC is focusing.

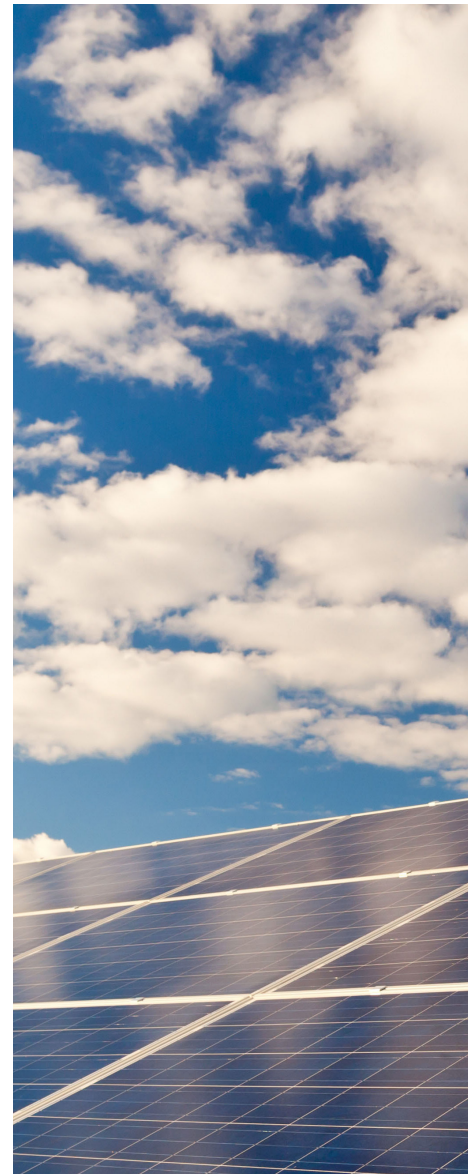
A key question is if (and how) reliability of renewable resources might shift baseload requirements, which is where coal and nuclear play their biggest role.

The bottom line is that any entity operating within the power and utility space needs to pay close attention to NERC as a regulator, and to which areas NERC is focusing on. The central function and operating objective of the electric side of the business is to “keep the lights on,” so reliability is the number one priority.

Increased enforcement by FERC could shift both the regulatory and enforcement paradigms, and companies should assess how this shift will affect their current approach to compliance implementation. They should also pay close attention to FERC comments and responses in rulemakings for signs of an increasing FERC role in cybersecurity regulation. Security and compliance processes and

controls have tended to overlook the role of supply chain and third-party vendors. Companies now need to develop programs designed to mitigate risks associated with both. Traditional approaches may not be effective, as they frequently involve complex contractual issues, labor law challenges, foreign nationals, and multiple internal organizations. Each of these factors can raise unique security challenges.

Cross-border collaboration and generation source issues should both be closely monitored to assess their potential impact, which could vary greatly depending on the entity. For some, it may affect their load management and forecasting; for others (e.g., generation asset owners and developers), there could be a direct impact on their business models.







# Cybersecurity regulations



Cybersecurity regulation is a topic to monitor closely. Greater regulatory focus will lead to increased obligations to better structure and implement governance and compliance programs to ensure cybersecurity activities are being executed as designed. This isn't only for the sake of regulatory compliance, of course, but to also keep the business and its cyber assets secure.

Regulation of cybersecurity operations and activities continues to evolve, with a current mix of mandatory regulatory requirements and regulatory pressure to step up voluntary efforts. For example, the bulk electric system is wholly regulated for cybersecurity activities. But at the distribution level, state regulators have begun to put basic cybersecurity regulations in place. In all sectors, there continues to be a focus on this area to determine whether additional regulation may be required.

Key issues include:

**Privacy and data protection.** There's an intersection between privacy and data protection regulation that often includes fairly comprehensive cybersecurity requirements. Many organizations—especially large and/or global entities that operate across multiple jurisdictions—are being overwhelmed with burdensome and sometimes conflicting obligations. Some of the newer regulations require a complete assessment and possible restructuring of technical solutions that may not be contemplated.

**Cloud services.** The rise of cloud-based platforms introduces a significant number of cybersecurity challenges and risks not previously accounted for in contractual relationships, nor in the design of cybersecurity controls. Specific examples include encryption, access perimeters and portals (additional points requiring security), ownership of controls, and coordination/management of controls monitoring and testing. These issues often are assessed and managed in real time on a one-off basis (per product/service), which doesn't permit the more comprehensive and strategic analysis needed to properly address the issues for the long term.

**Third-party/supply chain.** All industries are grappling with how to manage risks associated with third-party vendor support and supply chain management. The former involves review and updates to practices for vetting, onboarding, access management, and off-boarding of contractor and vendor support. This frequently raises both contract and labor law issues. In situations where the personnel may be foreign nationals or are performing tasks from another country, it also creates unique challenges in the context of processes that might not consider specific cultural or country-related issues. The latter, supply chain management, requires comprehensive reviews of existing agreements and creates a need to construct and understand the supply chain from start to finish before even trying to assess risks and gaps.



Procurement and human resources (HR) are at the center of these issues and should play an active role in designing and implementing updated processes and controls to address identified risk gaps. Emphasis should be placed on change management in this area. Change management often requires significant changes to long-standing processes, as well as implementation of controls in organizations not historically subject to the rigorous types of processes and controls required for cybersecurity.

Moving forward, entities should establish strong governance structures, accountability frameworks, and compliance programs. These are typically not areas of focus within IT and security organizations. Whether the activities are regulated or not, entities could benefit greatly from establishing better governance and compliance constructs to

ensure the various processes and controls that have been established are being consistently, rigorously, and accurately executed as designed.

Many cybersecurity gaps are the result of procedural failures that can be more effectively mitigated by designing and implementing a robust cybersecurity compliance program. Risk-based approaches to assessing gaps and implementing changes should be a foundational aspect of this structure or any solutions.

Entities should establish regulatory monitoring and change models to track applicable regulatory activity and be able to respond quickly. This includes impact assessments, input on the regulations, and implementation planning with sufficient time to address all required changes to current

activities. Along the way, it's important to engage all stakeholders, as the rules often cut across all organizations within a company.

In addition, entities need to evaluate existing procurement, asset management, and HR processes to understand where third-party and supply chain cybersecurity implications might exist. For example, existing or long-standing agreements with vendors might not provide sufficient protections for issues caused by a vendor or the leverage to implement better controls (or any controls) for that vendor.



# Utility commodity hedging and risk management

In a continuing trend, a number of state PUCs are taking a closer look at the hedging practices of electric and gas utilities under their jurisdiction. In Washington state, Florida, and elsewhere, the commissions are driving discussions with the utilities to understand the approaches the companies have been using to manage commodity price risk on behalf of their ratepayers.

This ongoing scrutiny is bringing into question the historical practices of many utility companies, particularly the hedging strategies that are driven primarily by volumetric targets intended to mitigate price fluctuations that are then passed on to ratepayers. Commissions are asking whether this volume- and price-driven approach to hedging has had the inadvertent effect of exposing the utilities, and by extension the ratepayers, to market risks that aren't in line with overall risk tolerance and performance objectives.

In a number of states, PUCs have required gas and electric utilities to examine the strategies that have historically been used to hedge commodity market price risks. In some cases, utilities have been "price takers" and have decided to forego a more proactive hedge strategy. In other cases,

utility companies have employed time- and volume-driven hedge strategies as a way to lock in a portion of their commodity price exposure, for better or worse.

Some studies have shown that this approach can be costly to ratepayers in years that saw price movements against the utility company's natural position. As a result, some commissions have asked utility companies to evaluate a more risk-driven approach to hedging (i.e., a strategy that's more tied to defined risk tolerance and performance objectives, and which leaves some room for responsive actions on the part of the utilities when commodity prices threaten to exceed the stated risk tolerance levels).

As a result, utility companies in several states have conducted analyses to gain a better understanding of their market price exposure and how that exposure might change under varying market conditions. This has prompted the impacted companies to develop new modeling capabilities that allow them to assess their risk appetite in a more quantifiable way than before and to perform scenario analysis on the efficacy of various hedge strategies. In many cases, this includes the introduction of new risk limits and triggers,

as well as the introduction of new hedging instruments, including financial options.

The implementation of a new approach to market risk hedging strategies necessitates a number of potential changes, both within the companies themselves as well as with their regulator relationships. For companies, both the up-front strategy analysis and ongoing execution often necessitate the development of new risk analytics capabilities, modeling, system support, and independent risk oversight.

For their relationship with regulators, evolving away from legacy volumetric strategies requires a clear understanding among the stakeholders about the objectives of the program, the approved risk-driven responses, and the level of monitoring and reporting that's prudent. This implies a coordination of sorts between the companies and the regulators, such that the focus remains on the best interests of the ratepayers without placing undue burden on the regulated utilities in the event of unanticipated (yet normal) market movements.

# A call for decisive action in uncertain times

Regulatory uncertainty remains a fact of life. But in most cases, waiting for absolute certainty isn't a viable option. Instead, energy companies need to keep moving forward as planned, taking decisive action while paying close attention to emerging regulatory developments and staying as flexible as possible.

The good news: Many of the changes companies are currently implementing make good sense from a business perspective—not just a regulatory perspective. Therefore, they're worth doing no matter how the future unfolds.

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# Endnotes

- 1 Farewell Address of CFTC Commissioner Sharon Y. Bowen at the Institute of International Economic Law at the Georgetown University Law Center, September 25, 2017, US Commodity Futures Trading Commission, <http://www.cftc.gov/PressRoom/SpeechesTestimony/opabowen-16>.
- 2 Speech of James McDonald, Director of the Division of Enforcement Commodity Futures Trading Commission Regarding Perspectives on Enforcement: Self-Reporting and Cooperation at the CFTC, September 25, 2017, US Commodity Futures Trading Commission, <http://www.cftc.gov/PressRoom/SpeechesTestimony/opamcdonald092517>.
- 3 Chatterjee Named FERC Chairman, News Release: August 10, 2017, Federal Energy Regulatory Commission, <https://www.ferc.gov/media/news-releases/2017/2017-3/08-10-17.asp#.Wdft-2hSx3g>.
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- 5 MIFID II, European Securities and Markets Authority, <https://www.esma.europa.eu/policy-rules/mifid-ii-and-mifir>.
- 6 2017 Staff Report: Lessons Learned from Commission-Led CIP Version 5 Reliability Audits," Federal Energy Regulatory Commission, October 6, 2017, <https://www.ferc.gov/legal/staff-reports/2017/10-06-17-CIP-audits-report.pdf>.
- 7 <http://www.nerc.com/gov/bot/Agenda%20highlights%20and%20Mintues%202013/Proposed%20Resolutions%20re%20Supply%20Chain%20Follow-up%20v2.pdf%5d>
- 8 <http://www.nerc.com/news/Headlines%20DL/PES%20-NEERC%20Renewables%20Press%20Release%20Final.pdf>



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