THE CONSUMER’S INTEREST IN REFORMING WEST VIRGINIA’S ELECTRIC POWER INDUSTRY
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Introduction

Energy is big business in West Virginia, so it is no news to residents that the energy industry is in the midst of a significant transition. Everyone knows West Virginia produces and burns a lot of coal. Over the last 10 years natural gas production has grown substantially in the state, and West Virginia is now the country’s seventh largest producer. Nearly 5 percent of the electric power generated in the state now comes from renewable sources, mostly hydroelectric and wind power, but a small amount of solar power too.

The energy transition is happening worldwide, driven by economics, engineering and public policy. The stresses put on the old ways of doing things are visible in West Virginia. One of those “old ways of doing things” is monopoly regulation of the industry by a handful of political employees, an approach not well equipped for an energy transition. This report aims at revealing the consumer’s interest in switching from the current regulated approach to retail electricity in West Virginia to a more competitive, consumer-focused approach that has been adopted in a few other states. Such a shift would let more West Virginians get what they want from the electric power industry.

The once sleepy electric utility business regularly finds itself in the headlines. One day the issue is a potential closure of an aging power plant, the next it is plans to build a new, highly efficient natural gas plant, and the next a controversy over proposed construction of a transmission line. The most important decisions affecting electric utilities are worked out by regulators in the state capital or decided by federal regulators in Washington, D.C. Often enough state or federal courts are involved.

Consumers have a voice in this process, but it is a limited one. Most of the discussion before state and federal regulators revolves around highly technical accounting, economic, and engineering reports. The utility companies have their experts to lobby for their position. The regulator, too, is staffed with experts, and some big industrial consumers and competing power generators have their lawyers and other consultants following the matter.

Residential consumers are overmatched in this battle of experts. While the state regulator has an independent consumer advocate division, it is a challenge for that office to represent the diversity of state consumer interests effectively in complex cases. Unlike, say, the gasoline business—where a consumer unhappy with the price or service at one company can usually find another supplier just down the street—in the regulated monopoly utility world unhappy consumers are stuck. The consumer can file complaints and hope someone will listen, but meanwhile they must pay the bill.
West Virginians are quite familiar with this traditional approach to electric utility regulation. The Public Service Commission of West Virginia was created in 1913 to regulate railroads in the state, but expanded to regulate telephone, gas, and electric companies. For electric companies, the traditional approach has been to give private companies a state-protected monopoly territory in exchange for state authority over the rates the companies charge. Technical conditions in the electric industry seemed to require monopoly control at the time. An implicit agreement was formed: the company gained the stability necessary for it to invest with confidence and the state gained the ability to require companies to share their gains with consumers.

It is a system that seemed to work well for years across the United States. The industry grew bigger, companies received predictable profits, and consumers saw expanded service and lower prices. But the system no longer works so well: energy prices to consumers have gone up even as fuel costs have gone down.

West Virginia has long had lower power rates than most of the country. As recently as ten years ago, residential power prices in the state were two-thirds the national average. Since then, however, rates in West Virginia have nearly caught up and now stand at just ten percent below the national average. Nationwide the wholesale price of electricity is low and steady. Coal prices are low, and natural gas prices are low too. Rates paid by West Virginian consumers for electricity have increased nearly every year over the last decade. The implicit agreement at the core of the regulated monopoly approach appears to no longer be working for consumers. The monopoly system is delivering higher retail prices to consumers at a time when wholesale electric prices are low. The monopoly system traps consumers into shouldering the risks of decisions made by utility executives with regulator approval. It is a system in need of reform.

About 20 years ago, several states pursued customer-oriented reform of their retail electric power sectors. Reforms produced a dramatic failure – California’s flawed design blew up in 2000 and 2001 – but also there were solid successes in states like Pennsylvania and Texas. West Virginians can learn what to do and what not to do from these experiences. Key to success for the Texas reforms has been isolating the potentially competitive part of the business—generating electric power and serving retail customers—from the transmission and distribution wires business which remains a smaller, still-regulated monopoly service. “Quarantining” the monopoly seems to be the critical step.

West Virginia consumers need not be held captive to the regulatory bargain between utilities and state government made nearly a century ago. That bargain deserves a fresh look. This report explains where West Virginia citizens and policymakers can go from here, and why.
Why Reform? – Serving Diverse Power Consumers

Diverse Consumers, New Opportunities: Electric Power Not Just a Commodity

Consumers do not spend much time thinking about electricity. We want light and we flip a switch. We want to watch television or run a dishwasher and we press a button. We want to use a computer, run a vacuum cleaner, cook something on a stove, perhaps cool the house in the summer and heat the house in the winter. Usually, we think about electricity once a month when paying the bill, or when the lights go out.

But when looked at beyond the switch, at the bill and the power system behind the bill, at the economics and politics that governs that system, there is much to think about. Not all power consumers are the same. Some are paying for power to run life-protecting medical devices at home and others to play video games. Some high-tech manufacturers need a high-quality power source, but most consumers needs are not as demanding. Not all power supplies are the same, either, and that matters to many consumers. In West Virginia, many are proud to consume coal-fueled power, but some feel it is time to move on to other sources of energy.

Monopoly regulated electric power, however, tends to be a “one size fits all” kind of system. Customers only have access to the choices that the utility, the regulator, and other experts agree they can have.

The Customer Choice Alternative

A number of states pursued customer-choice focused reforms of the monopoly regulation system beginning about 20 years ago. At the time, the deregulatory movement was a bit speculative. Deregulation in industries ranging from air travel to natural gas transportation to financial services appeared to be paying off: consumers were gaining lower prices and better choices. Some electric power consumers – especially large industrial and commercial users – wanted to capture those same benefits from reforming the electric power system. As a result, the federal government pushed reforms allowing competition at the level of wholesale power transmission and sales. A handful of states pursued similar reforms to retail electric power sales.

Have these reforms been successful at providing lower prices and increased choices to consumers? Much depends upon how well market rules are set up. Increasingly, however, it is clear that moving away from the regulated monopoly system can work. If done well consumers get better prices and increased choices.
Figure 1 shows average retail price of electricity for residential consumers in West Virginia, the solid blue line, and for several comparison groups. Prices have been adjusted for inflation. The average retail price of the top 10 reformed states, as ranked in the 2015 ABACCUS study, is shown with the yellow dotted line. The ABACCUS study was an annual report that scored state electric power reforms based on the quality of the state’s market rules. The average price of the top 3 ranked states is shown with the orange dotted line. The average price of Texas, the state with the best overall ABACCUS rank, is shown in red. The dotted blue line represents average prices in traditionally regulated utility states. One thing to notice is low-priced states in the late 1990s-early 2000s tended to stay regulated, while high-priced states were motivated to pursue reforms.

Figure 1: Average Retail Price of Electricity (EIA data, inflation adj., 2015=100)

[Source: Calculations based on EIA data. See discussion in text.]

1 Nat Treadway, Annual baseline assessment of choice in Canada and the United States, Distribution Energy Financial Group LLC, July 28, 2015. Hawaii and Alaska are omitted from the regulated states. According to the ABACCUS study, the top 3 reformed states are Texas, Pennsylvania, and New York. The remainder of the top 10 states are Connecticut, Maryland, Maine, Illinois, Massachusetts, Ohio, and New Jersey. Reformed states with ABACCUS Scores below 40 were omitted as insufficiently open to competition or flawed in implementation. These states are Delaware, New Hampshire, Rhode Island, California, and Michigan.

2 Also note that some Texas consumers remained served by traditionally regulated utilities, municipal utilities, and rural coops. Prices in these areas tend, perhaps about 25 percent of the residential load, resemble those of regulated utilities in other states. Because of the way EIA data is presented, these prices are averaged into the state average along with prices paid by consumers in the competitive retail market. The result is to dampen the apparent effect of competition shown in Figure 1.

Also consider the fuel sources used by different states. West Virginia’s electric industry is heavily reliant on coal, and that kept residential prices lower in the state through 2009. On the other hand the Texas power market relies on significant amounts of both coal and natural gas.\(^3\) Natural gas prices rose steadily up until mid-2008, then fell afterwards due to the hydraulic fracturing production boom. Some of the Texas residential price movement is driven by those wholesale natural gas price trends. A substantial amount of subsidized wind power has also been added in Texas over the time period depicted.

Still, the picture is dramatic. West Virginia once had one of the lowest residential power prices in the nation, while Texas fell in the middle of the pack. As of the end of 2016, residential prices in Texas averaged below those in West Virginia. These price trends emerged despite Texas’s steadily growing economy and West Virginia’s slow decline in population over the period shown.

While average prices in the reformed states are still higher today than in regulated states, they started higher – often because of state taxes, regulations, and other factors that affected the cost of doing business. For the Top 10 reform states, inflation-adjusted prices are just over 1 cent per kWh higher on average when compared to prices in 2001 (about 9 percent higher). In regulated states, on the other hand, comparable prices are up over 1.5 cents per kWh since 2001 (about 15 percent higher). West Virginia prices started lower than the national average but rose faster. West Virginia prices rose nearly 3 cents per kWh, and were nearly 36 percent higher in 2017 than they were in 2001.

Reasons for Moving Forward Carefully

Reform can go badly. Raise the idea of electric power reform and it does not take long for a critic to say, “What about California?” California’s reformed power market failed pretty spectacularly between 2000 and 2001. One of the state’s largest utilities filed for bankruptcy and another came close to bankruptcy. The state’s power grid operator had to rely on brown outs and rolling blackouts to keep the system from failing altogether. While traditionally regulated electric utilities experience the occasional blackouts due to storms or other problems, and some suffer financial problems, no U.S. electrical system in recent memory has failed so completely.

The best response to the critic is that West Virginia need not repeat the now well-understood mistakes California made. California made at least three critical mistakes in its power market

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3 Texas produces about 45 percent of its power from natural gas and 30 percent from coal. Source: [https://www.eia.gov/state/?sid=TX](https://www.eia.gov/state/?sid=TX). West Virginia is producing more natural gas these days, but uses little in its regulated electric power system. According to U.S. Energy Information Administration, in 2016 West Virginia’s electric power production was 94 percent coal-fired and under 2 percent from natural gas. Source: [https://www.eia.gov/state/?sid=WV](https://www.eia.gov/state/?sid=WV)
reforms: (1) California froze retail rates while wholesale prices were allowed to rise.\textsuperscript{4} A dry year significantly reduced the hydroelectric supply to the state, and boosted wholesale prices to levels at which utilities were unable to pass along to consumers. Financial losses and bankruptcy were a natural consequence. (2) The wholesale market design put in place was easily manipulated when supplies became short, further boosting wholesale prices. (3) Utilities in the state were unable to protect themselves against either the seasonal price trends or the short-term price spikes because under California rules they were required to buy all of their supplies within the short term market.\textsuperscript{5}

In addition, California started wholesale and retail sector reforms at about the same time, so problems in one spilled over into the other. The California ISO wholesale market was relatively new and untested when the retail reforms were launched. By contrast, Texas retail competition was launched a few years after the wholesale market went live, and the retail launch was without major problems. West Virginia utilities are now part of the well-regarded, long-established, and well-tested PJM regional power market. West Virginia has a solidly competitive wholesale market upon which provides the necessary foundation for a stable and reliable competitive retail electric market.

Important lessons have been learned from the California disaster. No other reform state repeated these mistakes, and no other reform state has had anything like the California power industry failures of 2000-2001. West Virginians needs not fear a repeat of California-style failures.

One the other hand, the state-regulated monopolies stumbles badly from time to time as well. Regulated electric ratepayers South Carolina are faced with higher power bills to cover the more than $9 billion spent on two abandoned nuclear power plants. How much ratepayers end up paying on the project – proposed by the utility and approved by state regulators – will depend upon the resolution of several court cases. In Georgia, another utility-proposed, regulator endorsed nuclear power project is five years behind schedule and now projected to cost $28 billion, and some Georgians want to abandon the project before more money is spent. These failures are discussed more below.

West Virginians should move carefully toward customer choice in electric power. While a few states have as much as twenty years of experience with customer choice, the diversity of approaches and outcomes means the state should consider carefully what is working. That twenty years has featured one major reform failure. At the same time, the traditional approach of

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\textsuperscript{4} Over the course of the electricity crisis California imposed wholesale price caps on certain producers, but the retail price controls were much lower than the wholesale price controls.

\textsuperscript{5} Except for certain generation resources they were not required to sell off.
state-regulated monopoly with captive customers has been developed over 100 years as is likely about as good as it can get. And while the regulated system can point to many successes, captive customers should be alarmed that a system that is as good as it can be nonetheless still makes billion dollar mistakes. The risks of reform do not look so risky in context.

Reliability objections

When consumers push for competitive alternatives to utility service, utilities often claim a need to monopolize the local electric system to ensure the system remains working properly. The modern era of competition began in 1978 with a federal law permitting certain small renewable power projects and so-called “co gens” to connect to local monopoly utilities. Utilities said the law would threaten reliability, but the law is nearing its 40th year without being blamed for any major utility failures. Similar concerns about reliability were raised when the 1992 Energy Policy Act required utilities to open up their transmission systems to third-party shippers – often competitive power plants selling to industrial consumers. That law is over 25 years old, and has not been identified as the cause of any major outage either.

In each state, when consumers and independent power producers have promoted competition, utilities tell legislators, regulators, and anyone else who will listen that the reliability of the grid is at risk. Except in the case of California, as discussed previously, no reformed state has shown competition-based reliability problems. Critics pounced on rolling blackouts in reformed Texas in February 2011 as evidence of reliability troubles in a competitive market, only the second time the state had resorted to that emergency safety measure. But the first time the state employed rolling blackouts, in December 1989, was at a time that all of the state’s utilities were traditionally regulated. In both cases several consecutive days of bitter cold was the hazard that threatened reliability, not regulation or competition.

Forty or fifty years ago it seemed necessary for one company to own and operate all of the major components of the power system to keep it running. That limitation has since been overcome. For decades, independent power producers and competitive retail power suppliers have safely and reliably co-existed with utility operators on the grid. Under most ideas for customer choice, the utility stays in the business of owning and managing the local distribution wires, so reliability will remain the same for all customers no matter which retail energy supplier they choose.

A Little History – The Economics and Technology Behind the Regulatory Compact

The Regulatory Compact

The traditional approach to regulating electric utilities is over 100 years old. Although regulatory techniques have improved over time, the fundamental bargain between utility and government remains the same: the government grants and protects the utility’s monopoly ensuring an opportunity for a reasonable profit, and the utility seeks to deliver reliable power at regulated prices to all customers within its protected territory.8

There was some logic behind this bargain, sometimes called the “regulatory compact.” The growing electric power business faced a mismatch between its long-lived investments in power generators and distribution systems, and the relatively short-term business licenses available from local governments. This mismatch made investment risky and exposed the utility to the volatility of local politics.

In addition, the economics of the growing industry rewarded larger utilities that controlled every aspect of the system from generation to delivery to end consumers, due to extensive economies of scale and scope. Monopoly seemed natural, but potentially harmful to consumers if not brought under public control. State-based regulation by experts was the Progressive Era’s solution to these problems.

Moreover, it must be counted as a success. The industry grew under regulation, more and more customers were served, profits grew larger, dividends paid to stockholders were reliable, and prices fell consistently for decades. Rural areas were slower to be connected. Siting of power plants, especially hydroelectric dams, was often controversial. But the overall system appeared to work well enough.

The Regulatory Compact Shifts Many Risks onto Consumers

But this regulated system that seemed to make nearly everyone better off began to be limited by the 1960s and 1970s. One problem was inflation, which made it difficult for regulators to set reasonable rates for regulated utilities. Before inflation became the macroeconomic problem of the late 1960s and 1970s, the utilities’ previous year’s costs and revenues were a pretty good guide to next year’s costs and revenues; but unpredictable inflation produced regulated rates that were fixed either too high or too low. Profits suffered, then rates would jump up, alarming consumers. The electric power system no longer worked well for everyone, and at times it hardly seemed to

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work for anyone.

Just as inflation became a near constant problem, a number of utilities launched ambitious nuclear energy plans. Consumer’s concerns over nuclear energy – even if not always well founded – led to protests, delays in construction, and added regulation. Cost overruns, made worse by inflation, turned power plants that cost less than $200 million in the early 1970s into costing 10 times as much by the early 1980s. In some cases regulated utilities spent billions of dollars on power plants that were never completed.

The recent revival of interest in building nuclear power plants seems to present many of the same problem of cost overruns. In 2008, South Carolina Electric & Gas obtained regulatory approval to build two new nuclear plants at its V. C. Summer site at a total expected cost of nearly $10 billion. In 2017, after spending about $9 billion and raising customer rates several times to help cover the costs of the project, South Carolina Electric & Gas and its partners abandoned the project. Nearby in Georgia, Georgia Power and state regulators agreed in late 2017 to continue work on new units at the Vogtle nuclear plant, even as cost estimates have grown from $14 billion to more than $25 billion. Under Georgia rules, regulated utility customers must pay higher rates to cover the interest charges from construction on the plant, even though the new construction is far from completion.

The higher rates charged to consumers before they see any benefits reveal one key feature of the way regulated utilities work: decisions get made by utility executives and state regulators, and the risks of those decisions are placed on consumers. Usually, once a spending plan is approved by a regulator, then consumers are required to pay as long as the utility makes reasonable efforts to accomplish the plan. Even with significant cost overruns, as long as the utility can convince the regulator that the spending was needed, then consumers end up paying the bill.

In markets with retail choice, the shareholders in the company building expensive new power plants bear the risk, not retail consumers. Cost overruns come out of shareholder’s profits, not ratepayer pockets. Should a company decide to pull the plug on a project before it is finished, the owners pay the price of failure instead of captive utility customers. This is one way that reform can offer better consumer protection for retail power consumers.

What Does Customer Choice Look Like In The Reformed States?

What Do Consumers Do?

Other than periodically choosing an electric supply contract from among many options, a typical customer in a retail electric power market is not too different from those in traditional regulated
markets. The customer uses power in the usual way and pays a monthly bill from their electric power supplier. It is in shopping for a new supplier that things are different.

When a customer nears the end of their current supply contract, they begin to pay more attention to supply advertisements appearing on TV, in newspapers, and online. Most consumers also consult state-provided websites listing current power supply offers in a standardized format that makes comparisons among offers easier to do. The Texas Public Utility Commission oversees the www.powertochoose.com website, one of the more useful of such websites. The Texas website allows customers to enter a zip code to find locally available offers and the ability to filter and sort offers by various criteria.

Popular offers provide one- or two-year fixed rate contracts, but longer and shorter contracts are also available. Customers can select offers with high renewable energy content, variable rate contracts, pre-paid contracts, and time-of-use rates. Pre-paid plans are popular with low-income customers because they do not require a deposit or credit check up front and help customers better control spending on electricity. Some suppliers offer special contracts for customers who have solar panels on their home that pay the customer for excess power sent back to the grid.

In fact, so many different contracts are offered that it may be a little overwhelming at first. A customer in Houston or Dallas may have over 200 contracts to choose among. But such variety is easily reduced to a handful of contracts. A customer may only spend an hour or so, once a year, to make a selection.

Consider what power the customer gains from the ability to shop for power. In regulated markets, if the utility makes a mistake on the bill, a customer can complain to the utility and complain to the regulator. Maybe the mistake is fixed, and maybe not. In any case, the customer is stuck with the local monopoly utility. In competitive markets, suppliers sometimes make mistakes on customer bills, too. Again the customer can complain to the supplier and if needed to the state regulator. In this case, however, the customer has an even more powerful response to bad service from a power supplier: the customer can take their business elsewhere.

The potential loss of a customer is a powerful motivator for good customer service in competitive markets. Competition among retail suppliers helps keep customer prices down as well, at least in the better designed reform markets, as accumulating evidence is showing.

**Studies of Customer Choice**

Numerous studies of electric power reforms have sought to identify the consequences of breaking away from traditional regulation. Studies of wholesale competition quickly found that competitive generators tended to operate more efficiently than generators owned by regulated
utilities. The consequences of retail competition have been harder to identify.

Early studies of retail competition tended to conclude that reformed states saw prices rise faster than traditionally regulated states, but it was difficult to separate out the effects of rising natural gas and coal prices from the effects of retail competition. In fact, because regulated rates tend to delay the effects of changes in fuel costs, it was not surprising that competitive retail prices tended to rise a bit faster than regulated rates. We have seen the reverse effect as fuel costs have trended mostly downward since 2009: average prices in states with competitive retail markets have seen prices fall a little even as average prices in regulated states continued to rise for several years. The effect can be seen in Figure 1 above.

Sound comparisons have been hard to do, too, because of the many variations among states allowing reform. Most reforming states imposed price caps that lasted for several years, but allowed for adjustments. These caps expired at different times. Other reform states, like Michigan and Virginia, started along the way to opening up retail competition but then backtracked significantly. Some studies sought to avoid these difficulties by focusing on a single state, but this approach makes it difficult to identify what would have happened without the reforms.

A recent study of the Texas experience produced at Rice University’s Baker Institute for Public Policy may provide the best evidence to date. The study covers a long enough timespan to cover periods of both rising and falling fuel costs. In addition, while most retail consumers in the state have access to customer choice, several regulated electric providers in east and west Texas were allowed to stay regulated at the retail level because they did not have access to competitive wholesale markets in 2002. Municipal and cooperative utilities throughout the state were also allowed to remain monopolies. The variation in utility style within a single state, both competitive and monopoly, helps reveal the effects of competitive reforms.

The Baker Institute report found residential rates in competitive and non-competitive “behaved in a manner consistent with economic theory,” meaning the competitive prices tended to reflect changing wholesale prices while regulated rates generally did not. In addition, after adjusting for inflation, prices in competitive areas were lower in 2016 than when competition began in 2002. For areas that remained regulated monopolies, prices were a bit higher in 2016 than in 2002. Finally, the gap between wholesale and retail prices grew smaller in competitive areas but larger in regulated areas. In other words, the competitive system produced better prices for end consumers and more efficient outcomes overall.


Hartley, Medlock, and Jankovska (2017)
Not every state that has reformed to allow customer choice in electric power has produced such clear evidence in favor of competition. Details of the reform matter to overall success. To that end, West Virginia consumers should insist that the state adopt the best available rules for implementing retail choice.

**Best Practices in Retail Electric Power Market Reform**

**First Steps: Unbundling and Consumer Education**

An active, customer-oriented retail electric power market requires a competitive wholesale power market, a transmission and distribution company separate from retail electric power service, and an open retail electric power market. Currently regulated utilities in West Virginia participate in all three sectors of the industry. The first transitional step is reorganization of the electric utility into separate companies by sector: generation resources in one company, transmission and distribution services in another, and retail services in a third. At the same time, the customer bill should be unbundled to detail the portion attributable to each industry sector: generation and power supplies, transmission and distribution, and retail services. Eventually, the companies should be completely separated, but functional unbundling is a first step.

A good second step on the way to competition: let consumers know what is going on. Most reformed states accompanied the unbundling of the utility and bill with an active customer education program. The better electric consumers in the state understand the opening of the market, the better the resulting market will perform. A century of regulated electric utilities have left consumers unfamiliar with the idea of shopping for an electric power provided. Information from a trusted source can help consumers begin the process.

**Corporate Separation and Stranded Assets**

Several other transitional steps have been employed successfully. Choice opportunities should be opened to large industrial and commercial consumers first, next to smaller industrial and commercial consumers, and last to residential consumers. The staged roll-out of systems helps discover and address minor issues as they arise. One year from initial opening of the market to the largest consumers to fully opening the market should be sufficient.

Once the market is open, consumers can choose a new retail supplier or remain for the time being on the legacy utility service. During the first few years after fully opening the market, the legacy utility service rates would remain regulated by the PSC and perhaps capped as a consumer protection device during the transition period. Also during this transition period, the legacy utility company would be allowed to collect so-called “stranded costs” via a line-item on the customer
bill. Stranded costs compensate the regulated utilities for any loss of value for regulated assets shifted into the competitive sector, should the value of those assets be lower than the regulated book value. The company affiliate holding generation resources may be sold off as a whole, or generation resources can be sold off individually. Because the company will own most of the generation resources available to serve the state, market power concerns may be raised. The PJM market already has extensive rules governing market power and capability to monitor and mitigate against adverse effects.

Once the transition period has ended, recommended practice is to wind down legacy utility service and have all retail customers transitioned to competitive retail suppliers. Ultimately the goal should be complete corporate separation of the transmission and distribution utility—which would remain a regulated power delivery service—from the competitive generation and retail consumer services market. This separation should be complete to successfully quarantine the monopoly.

Many states have chosen to continue the legacy utility as a backstop service for consumers not making a competitive selection. However, letting an affiliate of the remaining regulated transmission and distribution monopoly participate in the retail market, even as backstop service, tends to undermine active competition. Independent retail suppliers will worry that monopoly wires company would tend to favor its affiliate over other retail suppliers, making the independent companies more reluctant to commit to the market.

Failure to fully separate regulated and competitive sectors of the business into companies under independent ownership and management also appears to guarantee ongoing battles by the regulated utility to use its special monopoly status to grow into and undermine the competitive sectors of the business. Ohio offers one example resulting from failure to insist on full separation. Most utilities in Ohio have remained in the retail business through providing default supply service for consumers not opting to choose a supplier, and generation resources were often spun off into unregulated subsidiaries. Only Duke Energy, delivering electricity in the Cincinnati area, sold off all of its generation resources, and in one assessment of restructuring in Ohio the Cincinnati area is the only part of the state showing clear benefits from electric power reforms.\(^\text{11}\)

Michigan offers another example: regulated utilities remained in the retail supply business as provider of last resort. When too many customers wanted to move to alternative suppliers, the utilities used their lobbying power in the state capital to get a cap on the number of retail

customers that can escape its service. Now customers wanting to choose their own electric power supplier spend years on a waiting list, hoping for the chance to be freed from a regulated monopoly that does not want to let them go.

Regulating the Distribution Monopoly

The transmission and distribution wires company remains a regulated utility in all of the states that have reformed to offer customer choice. While competition has proved itself in wholesale power supply markets and retail service, the natural monopoly logic that once dictated regulated monopoly for the whole system still seems to make sense for the networked distribution grid. The rules governing this distribution utility are important for consumer to get the most out of competition: delivery service should be provided to all alternative suppliers and end-use consumers on the same terms devised to recover the utilities’ revenue requires while being as neutral as possible toward retail supplier and consumer business models.

To this end regulated distribution rates should shift away from per kWh volumetric rates that leave the utility with a bias again self-generation and conservation-minded services. Rate decoupling is one well-developed set of ratemaking reforms that can neutralize the regulated utilities interest in consumer business plans. Under decoupling, regulated rates are set to recover defined utility revenue requirements and consistently updated to reduce over- or under-recovery of allowed revenues. Other ratemaking approaches are possible. The key, again, is to allow competition to flourish by containing the monopoly as much as possible. Smart rate design helps isolate the regulated monopoly.

Creating a Platform for Further Growth

An ideal long-term strategy would be to harmonize the rules governing West Virginia’s competitive retail market with the rules of neighboring states allowing retail electric competition. Harmonization of the rules enables suppliers to compete for business in each state with the minimum of regulatory red tape and delays. In addition, multiple states with identical rules helps ensure transparency in design and operation of competitive systems and will help spread “best practices” faster among competitive markets. Both suppliers and consumers would benefit from harmonization of market rules.

After the competitive retail market has become established, a future of innovation including new

and existing technologies such as smart office parks, home-based distributed power resources, and vehicle-to-grid systems may begin to emerge. For such systems to flourish, however, the regulated utility offering delivery service should transition into a full platform market for electric power services – a system allowing the many independent small-scale energy systems to buy services they need and sell resources they may have available. Such platform markets, too, should have their rules harmonized as much as possible with those of neighboring competitive markets.

The Changing Role of Regulators

With customer choice related reform, the role of the Public Service Commission will change. The distribution company remains a regulated utility, so ratemaking services will continue at a smaller scale. The important new role will be in overseeing the emerging competitive market. A number of new rules will have to be established to allow customers to switch providers, to allow secure sharing of customer data, for companies entering and exiting the market and so on. Experiences in other states have shown utility commissioners have a critical role to play in overseeing the performance and refinement of these rules. In addition, regulators have been useful in stopping fraudulent “slamming” or “cramming,” practices by unethical marketing companies to switch customers’ suppliers without customer authorization.

Conclusion

Now is a good time for West Virginians to pursue reform of its regulated electric power system. Traditional state regulation of monopoly utilities works best when times are stable. The energy industry is in transition, and the electric power industry is changing because of islow-moving regulatory processes try to manage a fast-moving energy market, the potential for costly errors increases.

In addition, the “one size fits all” nature of regulated service means that the service will not fit every customer equally well. The state’s electric power is overwhelmingly fueled by the state’s coal resources, and many West Virginians are proud to support the coal industry. Other West Virginians may take note of booming natural gas production in the state, and want their electricity choices to support it. Still other consumers would prefer to pay for renewable power supplies or even install a solar system on their rooftop. While regulated utilities can, if required to do so, offer different products desired by different kinds of customers, competition drives customer-minded products to develop by its very nature. No lengthy regulatory proceeding needed.

Regulated utilities often warn that reliable service will be sacrificed if competition is allowed, but experience does not support that position. Instead experience has shown that well-designed
reforms can reliably deliver power to customers, inspire efficiency among competing suppliers, and give customers better prices and more choices.

The most successful states have pushed electric generation and retail supply service completely into the competitive system. Regulations remain in effect to protect consumers from shady practices, but legitimate businesses are free to compete. The transmission and distribution wires-based business remains a regulated monopoly, but the key is ensuring complete separation between companies in the competitive businesses and those with protected monopoly positions. Quarantine the monopoly to the fullest to get the most active competition for retail customers. It is working in Texas and other reform states.

West Virginians, what are you waiting for?