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West Virginia Department of Commerce
Office of Energy
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RE: West Virginia Office of Energy Five Year Energy Plan for 2018-2022

To Ms. Bragg:

Monongahela Power Company (Mon Power) and The Potomac Edison Company (Pot Ed), collectively referred to herein as the "Companies," would like to thank the West Virginia Department of Commerce and the Office of Energy for the opportunity to provide comments for consideration in the development of the state's new five-year State Energy Plan (Plan) for 2018-2022.

Pot Ed serves about 140,000 customers in the eastern panhandle of West Virginia in 8 counties. Mon Power serves about 390,000 customers in 34 West Virginia counties. In addition to providing distribution services, Mon Power also owns and controls 3,580 MW of generation, almost all of which is located in West Virginia, serving West Virginia customers.

Our comments on each of the three respective sections of the Plan (Fossil Fuel, Renewable Energy, and Energy Efficiency) are found below, along with recommended additional items for your consideration where applicable.

FOSSIL FUELS

Policy Option #3 - Electricity Prices

Although West Virginia has experienced rising electric prices in recent years, our Companies, collectively, have three cases pending at the Public Service Commission of West Virginia (PSCWV) that would result in meaningful rate reductions for all of our customers, as filed. In the

proposed Pleasants Power Station acquisition by Mon Power, customers would immediately experience a rate decrease of approximately 1.6%, or \$24,000,000. If approved as filed, our proposed vegetation management rates would result in a reduction of approximately \$15,000,000 across all rate classes. Finally, our pending energy efficiency surcharge case, would save customers approximately \$5,400,00 across rate classes. In the aggregate, these cases would result in rate reductions of about 2.6% for residential customers and 3.6% for large industrial customers, totaling over an estimated \$44,400,000 annually across all customer classes. Additionally, the Companies are experiencing significant load growth in their service territories, due in part to the shale gas growth. This puts additional downward pressure on future rates as common costs are spread over the greater total usage.

While West Virginia has experienced rate increases in recent years, West Virginia rates remain competitive. West Virginia is just now approaching the rate levels other states have experienced over the years, as noted in the Plan.¹ The rate charts attached in the Appendix accompanying these comments demonstrate that West Virginia's rates still compare favorably to surrounding states and others that have restructured, i.e., instituted customer choice and competitive generation.

As acknowledged in the Plan, increases in electricity rates can be caused by a wide range of factors.² These reasons may include things like regulatory compliance, baseload power plant retirements, transmission expansion and replacement, costs of cyber security enhancements, energy efficiency, vegetation management plans, monthly meter reading, market conditions, and many other reasons. Some increases may only be temporary in nature, and may ultimately lead to decreases in the future, for example the ENEC fuel case, and surcharges such as the Vegetation Management Surcharge, and Environmental Control Charge. Some causes of rate changes are outside of the state's span of influence, and lie within the purview of the Federal Energy Regulatory Commission (FERC) and others. West Virginia, anchored by the authority vested in the Public Service Commission of West Virginia (PSCWV) by the state's regulated market construct, can currently exercise greater control over important decisions regarding its own energy landscape than those states that have relinquished vital portions of that decision-making authority to market forces. Any research on this topic must also include the observation that PJM markets are not designed to consider the myriad of resource planning issues that a public service commission necessarily considers for the good of its state.

Impact of Natural Gas on Coal in West Virginia

Throughout the Fossil Fuels section of the Plan, there are various references to the decline in coal coinciding with "the boom in production of shale gas."³ While this may be one of the many factors contributing to a trend in coal plant retirements nationally and regionally, we would caution that the Plan temper any unintentional implications that shifts in the natural gas industry are driving out coal within West Virginia. In 2012, West Virginia's energy mix was 97% coal, 3% renewable energy, and <1% natural gas. In 2016, those numbers only changed slightly, resulting in an energy mix consisting of 94% coal, 1.9% renewable energy, and 1.6% natural gas.⁴ In 2016, West Virginia

¹ Fossil Fuel Opportunities for West Virginia: 2017 Update at page 33.

² Id. at pages 33-34.

³ Id. at page 21.

⁴ Id. at page 27.

was the largest coal producer east of the Mississippi River and the second largest in the nation after Wyoming, accounting for 11% of total coal production in the United States for the year.⁵ This is not a seismic shift and certainly does not indicate a “rapid growth” of natural gas electric generation in West Virginia.⁶

Many of the coal plant retirements observed recently in West Virginia were brought on by regulations, such as the EPA’s Cross-State Air Pollution Rule, Clean Air Interstate Rule, and the Mercury and Air Toxics Standards (MATS). In particular, MATS established stringent limits for mercury, particulate matter, and hydrogen chloride emissions for all existing and new coal-fired generating units without any trading or generation station pooling to achieve compliance. The Plan attributes the retirement of three of AEP’s coal units to the conclusion that “operating coal plants is not profitable enough to maintain the plant.”⁷ More specifically, these plants were closed due to MATS, as acknowledged a page later in the Plan.^{8,9} As written, the Plan obfuscates what is occurring within West Virginia and the dynamics within the state between coal and gas, which may lead to inaccurate conclusions or misguided policy recommendations.

Policy Option #4 - Utility Restructuring

West Virginia has previously contemplated restructuring and found that remaining a fully regulated state was the preferred path forward. This was based on the determination that the state and the PSCWV are better positioned to ensure prudent, integrated cost resource planning (taking a holistic view of distribution, transmission and generation) for its constituents on a long-term basis than outside interests in Washington D.C. or Regional Transmission Operators like PJM, that may have shorter-term views and positions that may be unfavorable to West Virginia. Once a state has restructured, the utilities only control the distribution charges, and are no longer able to offer incentive rates for generation, which is by far the largest portion of customer bills. By providing for the holistic integrated resource planning mentioned above, West Virginia, like other regulated states, is better positioned from an economic development perspective to enter into arrangements for new load and to retain or grow existing load centers. To undertake evaluation of utility restructuring again would require significant analysis to determine what, if any, effort to pursue restructuring is even warranted, as well as the potential for stranded costs and other negative effects on West Virginia, such as the loss of coal-fired generation and subsequent deterioration of coal mining jobs. Ultimately, the electric utilities must be key participants in any study or analysis on this subject.

The Companies believe that it remains the utmost importance that West Virginia retain its ability to control its own energy future. West Virginia is uniquely positioned to observe the shortcomings

⁵ EIA State Profile and Energy Estimates. West Virginia Profile. <<https://www.eia.gov/state/?sid=WV>>

⁶ Fossil Fuel Opportunities for West Virginia: 2017 Update. Page v.

⁷ Id. at page 28.

⁸ Kammer – <<https://www.aep.com/environment/PlantRetirements/docs/Kammer/FAQ-KammerDecommissioning.pdf>>

Kanawha River - <<https://www.aep.com/environment/PlantRetirements/docs/KanawhaRiver/JUN15%20FAQ-KanRivDecommissioning.pdf>>

Philip Sporn - <<https://www.aep.com/environment/PlantRetirements/docs/Sporn/JUN15%20FAQ-SpornDecommissioning.pdf>>

⁹ Fossil Fuel Opportunities for West Virginia: 2017 Update. Page 29.

of how customer choice and reliance on academic market constructs have evolved to date, and continue to change. There has been a flurry of activity in recent years at the state and federal levels in which states are attempting to resolve some of the deficiencies found in the competitive markets. On September 28, the U.S. Department of Energy proposed a rule for final action by FERC that would require wholesale markets to fully compensate generation with 90 days of fuel onsite. These actions are based on the premise that competitive markets do not appropriately compensate baseload generation for their fuel-secure benefits, resulting in premature plant retirements. Similarly, in the face of these challenging circumstances, several deregulated states have already taken the steps necessary to regain control of their states' energy policy, and other states are currently evaluating similar steps to take back control of their energy futures.^{10, 11} Now would be a particularly precarious time for West Virginia to consider a move to deregulation, as emphasized by the PSCWV comments to FERC on the proposed rulemaking:

"The need for "always available" electricity has caused us to strive for adequate safeguards, reserves and redundancy in the electric supply markets. The PSCWV is not opposed to competitive markets. We are opposed, however, to failure to recognize that the markets are young and evolving. During this evolutionary process, our paramount goal is to maintain reliability, resilience, security and adequate supply. The siren call of low bidders should not be allowed to interfere with those goals. PJM runs an electric supply market, but it is not a mature market. PJM is constantly adding, subtracting and modifying its market rules, mostly in the name of reliability, resilience and adequacy of supply."¹²

"The PSCWV does not criticize the responses of market operators, such as the PJM responses, to concerns about adequacy of supply, reliability and resilience in markets that are really just developing. We only point out the ever shifting landscapes of developing markets because we support the efforts of the Secretary, and now the FERC, to consider more than lowest cost day by day and hour by hour energy markets in the evaluation of the market approach for electricity, a commodity that should have the highest priority for "availability" of any market commodity."¹³

There is broad consensus that PJM price formation is inadequate. Whether the remedy comes via a FERC ruling or PJM price formation reforms or both, changes will occur that will put upward pressure on market prices. As market prices increase, West Virginia customers will benefit from the cost-based generation that serves as a physical hedge to increasing and often volatile market prices. As the charts in the attached Appendix show, West Virginia rates currently are lower than most of the restructured states and that is prior to any anticipated market price increases due to

¹⁰ In Illinois, New York, and Connecticut legislation passed that would provide additional revenue to qualifying nuclear facilities to avoid their premature retirements.

- Utility Dive, December 7, 2016. "Updated: Illinois Gov. Rauner signs Exelon nuclear legislation." <<https://www.utilitydive.com/news/updated-illinois-gov-rauner-signs-exelon-nuclear-legislation/431803/>>
- Press Release, August 1, 2016. "Governor Cuomo Announces Establishment of Clean Energy Standard that Mandates 50 Percent Renewables by 2030." <<https://www.governor.ny.gov/news/governor-cuomo-announces-establishment-clean-energy-standard-mandates-50-percent-renewables>>
- CT Post, October 31, 2017. "Malloy signs Millstone nuclear bill." <<http://www.ctpost.com/local/article/Malloy-signs-Millstone-nuclear-bill-12320251.php>>

¹¹ Ohio House Bill 381 titled the Ohio Clean Energy Jobs Bill and New Jersey bill S-3061 are both being considered in their respective state legislatures. Pennsylvania announced the formation of a bi-partisan, bi-cameral caucus of Pennsylvania's General Assembly to focus on nuclear energy issues.

¹² FERC Docket No. RMI 8-1-000. Comments of the Public Service Commission of West Virginia on the Proposed Grid Resiliency Pricing Rule. Page 4.

¹³ Id. at page 5.

future price reforms. As with the PSCWV, the Companies urge West Virginia to hold true to the goal of maintaining reliability, resiliency, security, and adequate supply. That goal is best achieved by West Virginia retaining control of its own energy future, and minimizing exposure to the ever-changing conditions currently found in the competitive marketplace.

Policy Option #5 - Redevelopment of Retired Coal-Fired Power Plants

First and foremost, West Virginia, where able, should continue to take a proactive approach to help avoid the premature retirement of power plants. As for repurposing an available site, it is important to note that each retired facility is unique in the reason for its closure, its relative location to pipelines and wires, access to transportation, its environmental concerns, its need for confidentiality, etc. State funding for a portion of the path to redevelopment is likely sound policy. State partnerships with financial support, along with sound, streamlined environmental risk management, are likewise key to redevelopment of retired coal plant sites. The Companies will continue to work with the Department of Commerce on initiatives like this, and welcome further discussion on the subject.

RENEWABLE ENERGY

Regarding renewable energy policy, the Companies would urge that the final Plan reflect the direction already provided to date by the state's various offices and branches of government regarding renewables. For example, the PSCWV initiated a General Investigation into the net metering rules and has not yet issued an Order in that case.¹⁴ That General Investigation was necessitated, in part, by the legislative requirement for the PSCWV to "assure that any net metering tariff does not create a cross-subsidization¹⁵ between customers within one class of service."¹⁶ That ruling will likely provide the direction the state will go in addressing subsidization and valuing renewables. Additionally, the West Virginia legislature repealed the Alternative Energy Portfolio Standards and allowed solar energy credits to sunset without renewal or extension.¹⁷ This action provided further direction on the state's renewable energy policies. In short, any updates to West Virginia's Energy Plan should heed the direction already provided recently by the Legislature, the PSCWV and the Governor.

West Virginia's Future Energy Mix

The Renewable Energy section of the Plan states that it would be "valuable" for West Virginia to "participate in the transition away from fossil fuels and adopt new technology that utilizes renewable resources."¹⁸ The Companies believe that is misguided. West Virginia is uniquely endowed with an abundant variety of natural resources. We should efficiently and effectively

¹⁴ Case No. 15-0682-E-GI. General Investigation into net metering in West Virginia.

¹⁵ "Cross-subsidization" means the practice of charging costs directly incurred by the electric utility in accommodating a net metering system to electric retail customers who are not customer generators. W.Va. Code §24-2F-8(c)

¹⁶ W.Va. Code §24-2F-8(e)

¹⁷ House Bill 2535 passed in 2009 included a sunset date on the incentive for solar energy systems installed after July 1, 2013. The legislature opted not to renew that bill or extend that date.

¹⁸ Renewable Energy in West Virginia: Research for 5-Year Energy Plan Draft Report. Page 28.

utilize all of these natural resources to the benefit of our state. The paths to additional renewable deployment and preservation of critical baseload generation resources do not have to be mutually exclusive, and instead can run in parallel. West Virginia is best served by continuing to explore ways to encourage and develop a diverse generation mix, recognizing that generation resources have differing dispatch characteristics, which certainly may include cost effective renewables. For example, that may mean finding ways to remove obstacles and create efficiencies in the deployment and integration of emerging renewable energy technologies. It does not mean that West Virginia must toss aside its currently existing fossil fuel resources and disregard other important considerations like cost, existing subsidies and tax incentives, resource availability, reliability, resiliency, cost effectiveness, and adequacy of supply, to do so. Fuel-secure baseload generation in West Virginia remains critical. Accordingly, the Plan should also consider additional research in the development of clean coal technologies and how they may be used to benefit the state's existing baseload generation resources. The utilities today conduct Integrated Resource Plan studies, pursuant to the Legislature's recently enacted West Virginia Code 24-2-19, to determine generation need and options. The Plan correctly identifies that redundant generation creates an inefficient use of scarce economic resources.¹⁹ While complex and challenging, the state must balance these interests to ensure it is not simply pushing out one generation source under the mistaken guise that there is some inevitable "transition" towards another.

Solar Recommendation #1 - Solar Income Tax Incentive

The Companies believe, at minimum, that additional research is necessary before recommending the renewal of the income tax credit for solar PV. As noted in the Plan, West Virginia is not lagging compared to most regional states in residential PV installation, and is on par with other similarly situated states.²⁰ Since 2011, installed solar PV capacity has increased six-fold.²¹ Further, West Virginia's "total utility-scale non-hydro renewable electricity generating capacity per capita" is the highest of all states in the region, indicating that "significant amounts of renewable resources are being utilized for a state of its size."²² Additionally, "solar technology continues to see cost declines, making it more and more cost-effective to serve load, especially in areas where peak electricity demand coincides with solar output."²³ In the Companies' West Virginia service territories, we have witnessed solar PV installations continue to grow each year, with over 180 systems installed since June 1, 2015. That growth has occurred without the state income tax incentive. We concur with the Plan that the advancement of renewables does not require subsidies.²⁴ The Plan even acknowledges that the impact of allowing the income tax credit to expire "has not been evaluated in terms of consumer response."²⁵ Thus, it seems premature to recommend the renewal of the income tax credit to the detriment of the state budget without additional information. We recommend that further research be conducted to determine the necessity of the tax incentive and to perform a full cost-benefit analysis on the potential impacts of its renewal.

¹⁹ Id. at page 16.

²⁰ Id. at page 14.

²¹ Id. at page 14.

²² Id. at page 28.

²³ Id. at page 28.

²⁴ Id. at page 28.

²⁵ Id. at page 5.

General Recommendation #1 - Net Metering

As previously noted, the PSCWV initiated a General Investigation into the net metering rules and cross-subsidization between customers, and has not yet issued an Order in that case.²⁶ That ruling will provide guidance to the state on this topic. That decision pending, the Companies believe that the Plan's recommendation to "maintain the state's net metering policy" should, at minimum, be clarified. The recommendation on pages 28-29 of the Plan states broadly that West Virginia should maintain its current net metering policy, but in the accompanying subtext under that heading contemplate some deference to the PSCWV and the utilities to continue monitoring net metering in the state and make changes to the policy as appropriate. Therefore, the overarching recommendation of "maintaining the state's net metering policy" may be perceived as ambiguous or misleading. We would recommend it be clarified to give deference to the PSCWV's pending decision and to continue to recognize ongoing activities occurring throughout the state.

The recommendation should also be clarified to correct current situations where ordinary customers without net metering systems are subsidizing customers with net metering systems, in accordance with legislation passed requiring the PSCWV to prevent "cross-subsidization."²⁷ In short, there are indications that maintaining status quo on net metering policy is not the most appropriate action at this time. The Plan points out that West Virginia is one of only eleven states that continue to provide a full retail rate credit with no expiration.²⁸ To mitigate cross-subsidization and help ensure collection of fixed costs avoided by net metered customers, there are two general approaches, as detailed in the Companies' position statement on cross-subsidization in the investigation conducted by the Net Metering Task Force: (1) a Monthly Standby Charge; or (2) a Buy All/Sell All approach. Both approaches would be in addition to the collection of the incremental costs incurred solely for net metering.²⁹ Other states, like Indiana and Arizona, have recently passed legislation to reduce the compensation paid to more of a marginal cost of generation approach.³⁰ Additionally, while the Plan appears to minimize the impact the current net metering policy has, 77% of net metering in West Virginia occurs within the Companies' service territories, and the number of installed net metering systems continues to grow.³¹ The Companies concur with the Plan that net metering fails to compensate the electric utility for the use of the distribution system that is needed to deliver that energy.³² Moreover, the transmission system costs and the capacity portion of generation costs are not being paid for by net metering customers under the current full retail rate credit policy. The Legislature has made it clear there is to be no cross subsidization for net metering in West Virginia Code 24-2F-8(d). The current cross subsidization occurring needs to be reversed so that all customers pay their fair share of the actual costs incurred.

²⁶ Case No. 15-0682-E-GI. General Investigation into net metering in West Virginia.

²⁷ Renewable Energy in West Virginia: Research for 5-Year Energy Plan Draft Report. Page 8.

²⁸ *Id.* at Page 13.

²⁹ Net Metering Task Force Final Report. Tab 4. September 30, 2015. Case No. 15-0682-E-GI General Investigation into Net Metering in West Virginia.

³⁰ Renewable Energy in West Virginia: Research for 5-Year Energy Plan Draft Report. Page 8.

³¹ *Id.* at page 13.

³² *Id.* at page 8.

Specific Recommendation for Electric Vehicles (EVs)

We support the decision to include a recommendation on electric vehicles in the Plan, however, we believe the recommendation should be modified to promote utility engagement from the beginning of the process, and not only when it has reached “critical mass.”³³ Regulated electric utilities are well positioned to develop public electric infrastructure, particularly in early market transportation development phases. To promote this development, policymakers should consider the advantages and benefits for electric utilities to identify locations and install the infrastructure required to support EV operation, including ownership of EV charging stations, while allowing for cost recovery by the utility on a full and current basis.

The regulated electric utilities would be best positioned to offer public charging services. Utilities can plan and manage regular maintenance and upkeep to avoid long EV service equipment downtime, optimize EV charging retail rates, and plan for long-term infrastructure rollouts that are not subject to short-term profitability goals. Electric utilities can also identify EV charging stations sites in optimal locations across the service territory, taking into account low income/disadvantaged neighborhoods, travel corridors (which can help induce tourism) and optimal placement for grid interconnections. When the electric utilities have the opportunity to receive full and timely cost recovery, planning for and installation of public infrastructure is more likely to be where it is most suitable to enable greater EV adoption and thus, maximize deployment and environmental benefits.

Energy Storage

One additional topic that warrants further exploration is energy storage. Energy storage systems comprise of batteries, an inverter, control system, communications equipment, an enclosure and balance of plant equipment all interconnected and integrated into the electric system, physically and operationally with a utility controlled management system. Energy storage technologies—such as pumped hydro, compressed air energy storage, battery-based AC energy storage systems, flywheels, electrochemical capacitors, and others – provide for multiple uses: energy management, backup power, load leveling, ancillary services including frequency regulation, voltage support, grid stabilization, reliability and resiliency, and as part of microgrids.

The Companies believe that any deployment of energy storage should be done in a safe, secure, reliable and cost-effective manner that recognizes the benefits of the storage device, including reliability benefits, whether in front or behind the meter. Before energy storage technology is added to a circuit, however, its impact on the quality, safety, and reliability of service must be analyzed.

All utilities should have the ability to make investments in energy storage. Where energy storage technology is installed by a utility to enhance distribution operations, the Companies supports cost-effective use, and full and timely cost recovery for the deployment of such technology. Regulations and standards should recognize the flexibility of the various types of energy storage and the ways each can be best used. Regulations and standards should enable utilization of energy storage solutions, regardless of whether they support generation, transmission, distribution or demand-side

³³ Id. at page 30.

operations. Regulations and standards should also enable the provision of multiple services so long as safety, security and reliability are not compromised. Whether owned by utilities or third parties, when deployed in the distribution system, energy storage deployment should follow the same guiding principles as all other similarly situated resources:

- Ensure fair, economically viable compensation of services which will depend on regulatory framework and market design.
- Ensure retail ratemaking that avoids undue cost-shifting to customers that do not own storage devices.
- Enable full participation by utilities in the ownership and/or operation of distributed storage as determined by the utility and to support its business model, including maximizing reliability and the visibility and control of distributed storage by utilities.
- Encourage optimal location and other technical specifications when possible to increase the value that distributed storage provides to the distribution system.
- To the extent that distributed storage will also impact the transmission system, appropriate coordination between the transmission and distribution systems should be encouraged to enable the appropriate flow of information between the transmission and distribution operations and planning processes.

PJM Stakeholder Meetings

The Companies strongly encourage West Virginia to be engaged in ongoing discussions taking place at PJM stakeholder meetings regarding the introduction of renewable energy resources being brought on line, particularly with resources interconnected at distribution voltages. The jurisdictional boundaries between federal and state oversight of distribution facilities continues to blur, and states need to have a say as to information being provided, standards being recommended, and rules being made that affect distribution assets that fall under state review.

ENERGY EFFICIENCY

The Companies agree with the Plan that “significant energy savings can be realized without an Energy Efficiency Resource Standard (EERS),”³⁴ and consequently there is no need to establish an EERS in West Virginia. The Plan references numerous actions that can or have already been taken by the state to encourage and achieve energy efficiency without utility intervention. Specific examples include the implementation of building codes and standards, requirements for public buildings, state and federal funding for low income weatherization and industrial efficiency programs, etc.³⁵ Furthermore, there have been numerous federal standards changes across most major end uses over the past several years that are providing significant energy savings (lighting, appliances, HVAC, etc.). As such, the Companies do not support establishing an EERS in West Virginia as there is no evidence or support to justify establishing mandates funded by all ratepayers. The Companies recommend that prior to any policy decision to establish an EERS, there would need to be a demonstrated cost/benefit analysis to justify the corresponding ratepayer impacts. In addition, our experience in administering these programs has been that many

³⁴ Energy Efficiency in West Virginia: Research for 5-Year Energy Plan. Page 16.

³⁵ Id. at page 3.

customers, specifically in the industrial sector, do not wish to subsidize potential competitor's actions and instead prefer to make their own investment decisions on the benefits of energy efficiency programs. They have repeatedly demonstrated this preference by choosing to opt out of the programs for the industrial sector.

The Plan discusses utility incentives and lost revenue recovery, and further states that policy should "Ensure that investor-owned utilities are not harmed financially when they help their customers to save energy."³⁶ While the Companies do not believe EERS mandates for utilities are needed, we believe the state could adopt a construct where utilities have the ability to voluntarily offer energy efficiency programs if the PSCWV adopts an appropriate recovery mechanism that provides for recovery of costs and lost distribution revenues, as well as shareholder incentives.

Miscellaneous Energy Efficiency Feedback

Regarding LEDs, the Plan states that, "As of 2014 only 143 of 4,896 TBtu (trillion Btus) in potential source energy savings from LEDs were being realized"³⁷ There is no additional basis or context provided to support this statement being currently relevant. Since 2014, the cost of LED's have decreased significantly and customers are purchasing them in greater quantities than ever before. In a recent market assessment by NEMA, high efficiency standard A-line lamps – LEDs and CFLs – have continued to achieve approximately 50% of total lamp sales over the last several years, but LEDs since 2015 have rapidly replaced CFLs in this category. Many manufacturers and retailers have recently stopped selling or manufacturing CFLs supporting the market transformation to LEDs. A visit to a local retailer makes the market transformation to LEDs an obvious observation, supporting that significant energy savings are currently being achieved through LED lighting

The Companies urge you to please consider these comments as you work to finalize the Plan for 2018-2022. If you have questions or would like to discuss any of the material in more detail, please contact me, George Blankenship at (724) 244-4427, or Sammy Gray at (304) 345-4695. We would welcome the opportunity to discuss these matters further. Thank you again for the opportunity to comment.

Sincerely,



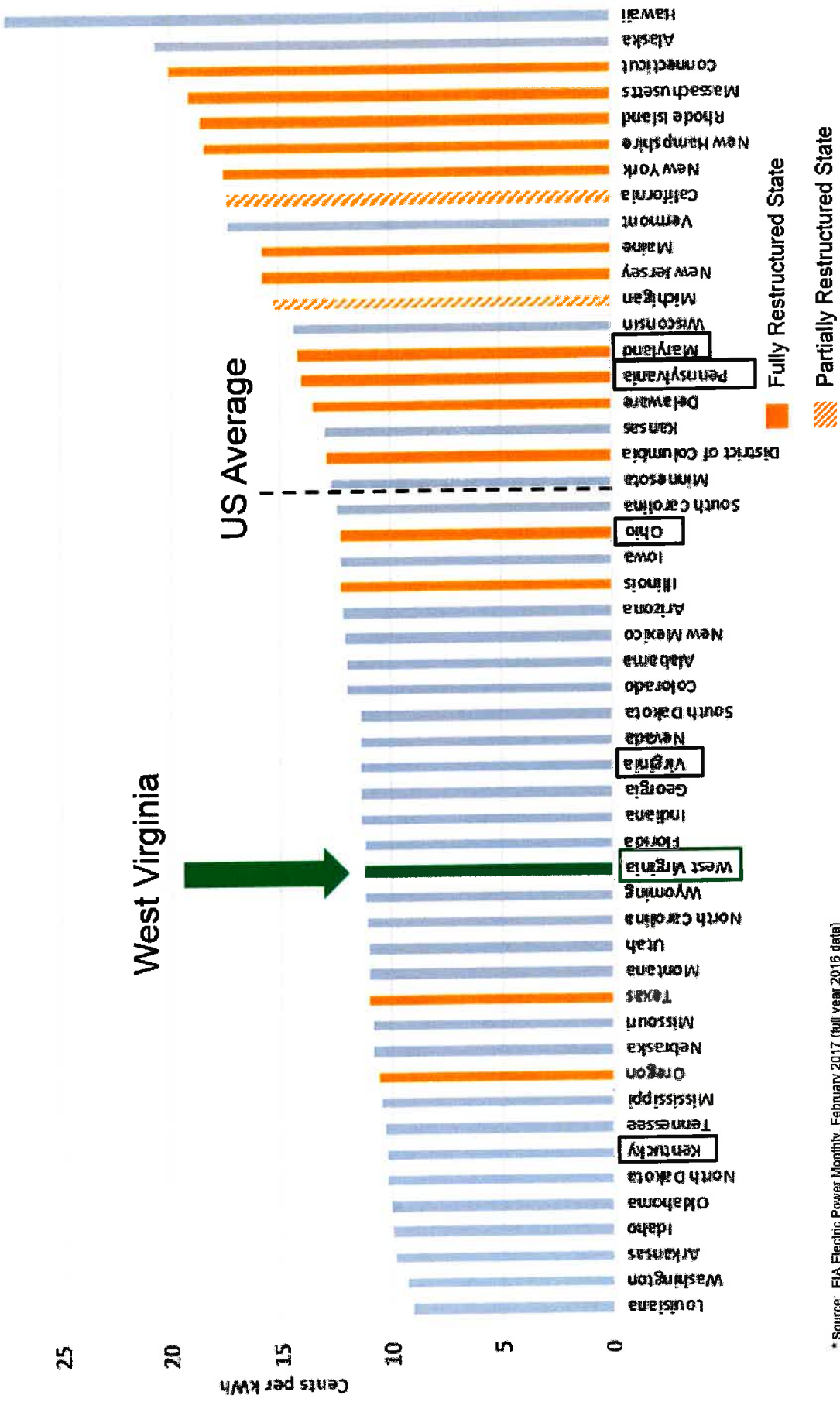
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³⁶ Id. at page 17.

³⁷ Id. at page 3.

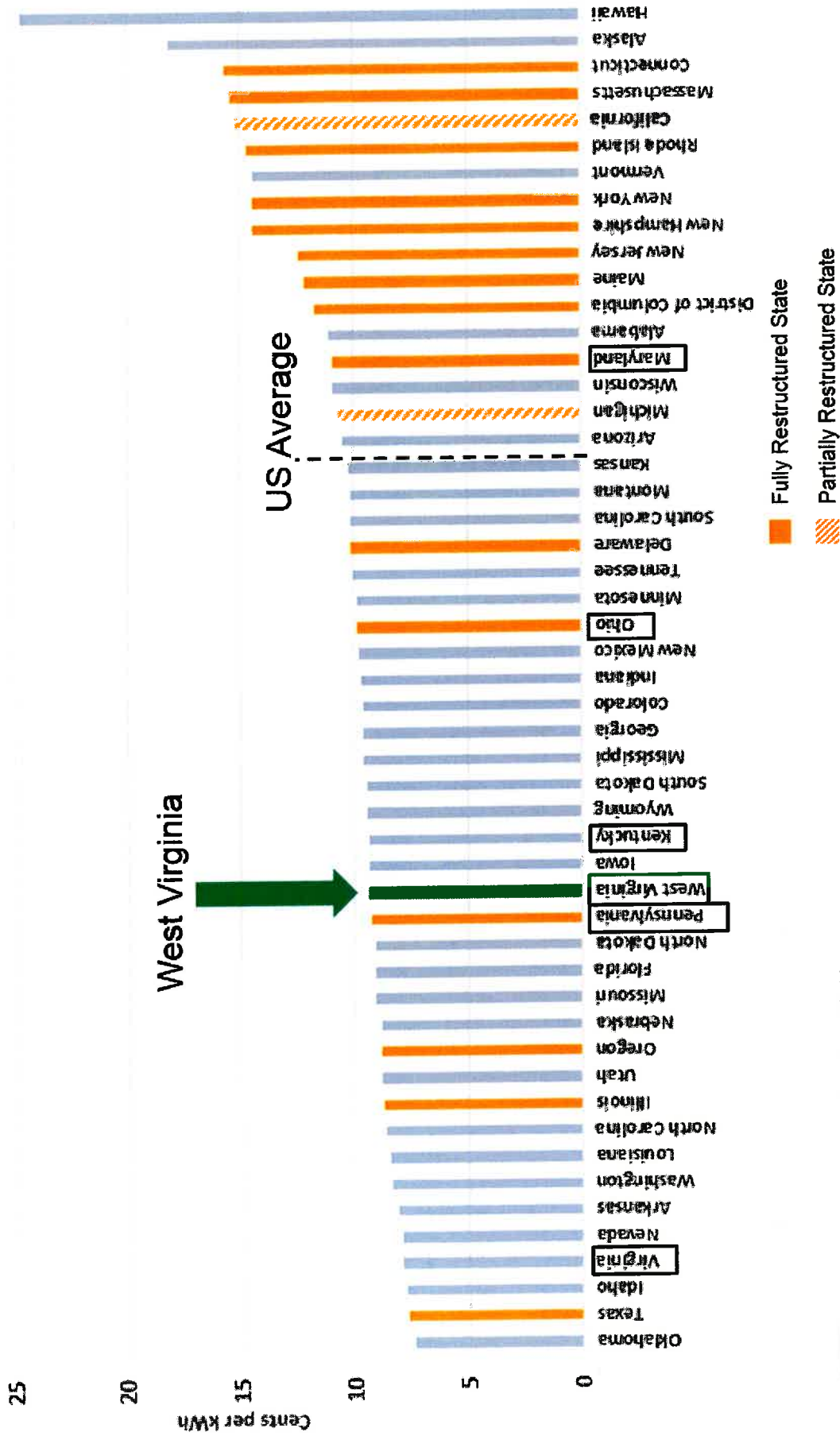
APPENDIX

West Virginia residential rates are lower than the U.S. average.



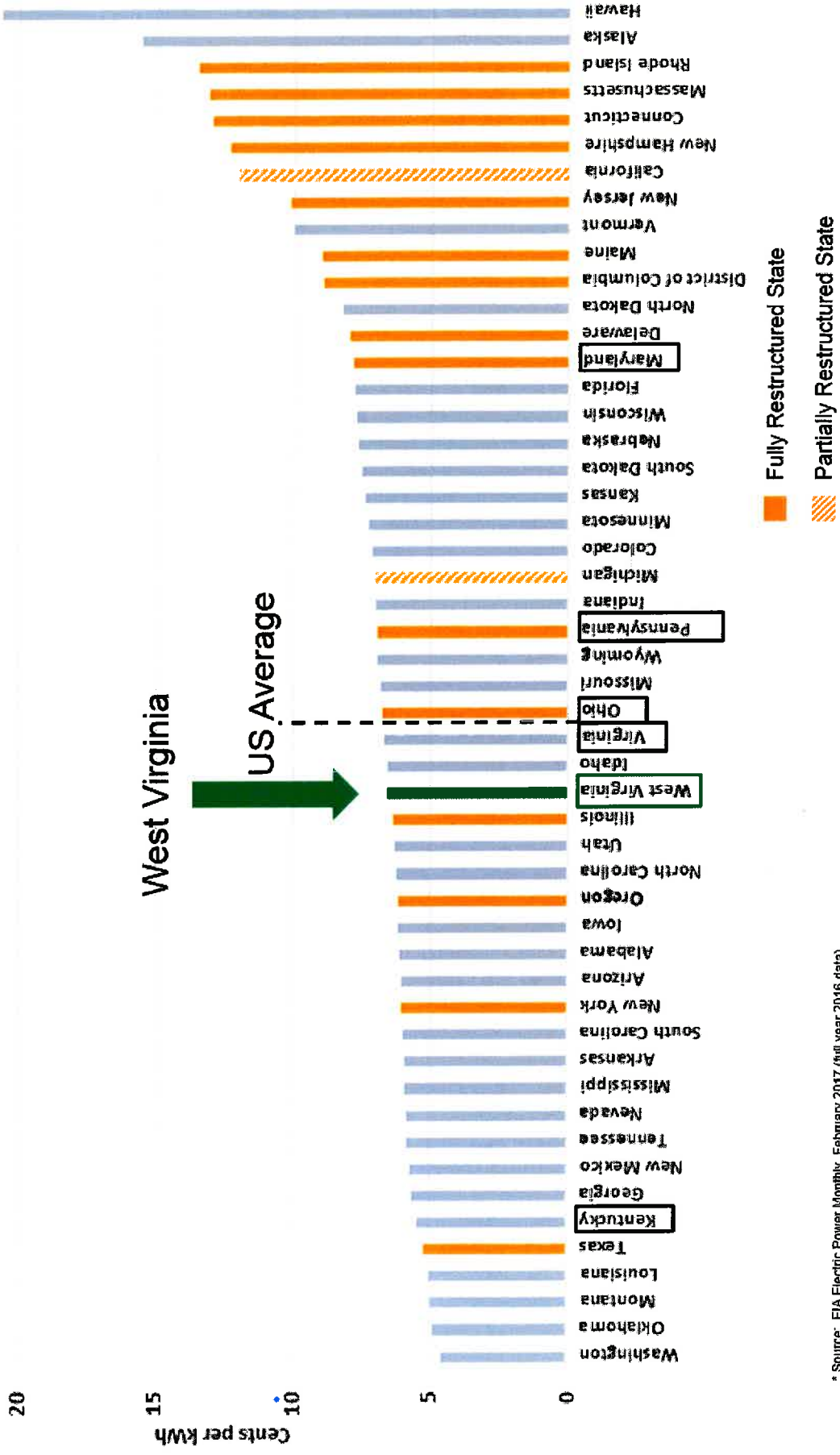
* Source: EIA Electric Power Monthly, February 2017 (full year 2016 data)

West Virginia commercial rates are lower than the U.S. average.



* Source: EIA Electric Power Monthly, February 2017 (full year 2016 data)

West Virginia industrial rates are below the U.S. Average and many surrounding states.



* Source: EIA Electric Power Monthly, February 2017 (full year 2016 data)