

Public Service Commission of West Virginia



2020 Management Summary Report and the Electric and Natural Gas Utilities Supply-Demand Forecasts for 2021-2030

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Charlotte R. Lane
Chairman



Renee A. Larrick
Commissioner

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www.psc.state.wv.us/Mgmt_Sum/MSR2020_Report.pdf

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Charlotte R. Lane
Chairman

February 10, 2021

To: The Honorable James C. Justice, II, Governor of West Virginia, and
Distinguished Members of the 85th West Virginia Legislature:

It is our pleasure to submit to you the *2020 Management Summary Report and the Electric and Natural Gas Utilities Supply-Demand Forecasts for 2021-2030*. This report details how the Commission continues to meet our mission of ensuring fair and prompt regulation of public utilities; providing for adequate, economical and reliable utility services throughout the state; and appraising and balancing the interests of current and future utility service customers with the general interest of the state's economy and the interests of the utilities.

This past year has presented a variety of new challenges to the Commission, not only in terms of continuing our statutory obligations during a worldwide pandemic, which we will detail later in this report, but also continuing to navigate the ever-changing atmosphere of utility regulation.

In order to respond to developments in the federal wholesale energy markets that impact West Virginia utilities, energy producers and customers, the Commission created a new position of Federal, Regional and Regulatory Policy Advisor (PJM Advisor). Jackie Roberts, who has served as the Commission's Consumer Advocate for the last seven years, will serve as the PJM Advisor and report directly to the Commission. Ms. Roberts' responsibilities will include keeping the Commission up to date as to market rules, energy policies and political development involving the PJM regional transmission organization and to work with the Organization of PJM States, Inc.

Early in 2020, Chairman Lane was appointed to the NARUC Broadband Expansion Task Force and has been working with the group to identify the best practices learned by both the utility sector and government in the expansion of broadband around the country, including funding mechanisms, coordination and targeting.

The Commission assisted Governor Justice in the development of the CARES Act Relief Fund program to assist customers who, due to the COVID-19 pandemic, fell behind on their utility bills. Once the program was announced, Commission Staff assisted the utility companies administer and customers apply for the funds.

In 2020, the Commission adjudicated nearly 1,900 formal cases, many of which generated significant public attention and ranged from complex major rate cases and applications for projects worth hundreds of millions of dollars to simple complaint cases. The Commission also processed nearly 11,000 informal cases and inquiries last year, including complaints about inadequate service, payment issues, service restoration and billing problems. Commission staff was successful in resolving over 98% of these at the informal level and 93.7% were resolved within 30 days, saving time and money for customers, the utilities and the Commission.

The Commission continues to encourage consumers to conserve and save money on their utility bills through targeted efforts, including Earth Day, press releases and the Chairman's biweekly columns. Once it is safe, we look forward to getting back into classrooms with conservation messages geared toward elementary school students.

Some of the challenges the Commission will face in the coming year include addressing the issues related to the abandonment of farm tap customers by natural gas utility companies; continuing to monitor the Frontier bankruptcy case and its impact on West Virginia customers; the proposed acquisition of West Virginia's largest local gas distribution company, Mountaineer Gas Company, by UGI Corporation; and the ongoing struggle of addressing infrastructure needs and affordable rates in the face of declining customer bases and sales.

We hope you find this report informative and we look forward to continuing to working with you to serve the needs of West Virginia.

Respectfully submitted,



Charlotte R. Lane
Chairman

Renee A. Larrick
Commissioner

Brooks F. McCabe, Jr.
Commissioner

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Meet the Commissioners

Chairman Charlotte R. Lane



Charlotte R. Lane was appointed to the Public Service Commission and as Chairman on July 1, 2019. She previously served on the Commission from 1985-1989 and 1997-2003, serving as Chairman from 1997-2001. She has had a long career of public service in addition to her prior work on the Commission, having been elected to three terms in the West Virginia House of Delegates (1979-1980, 1991-1992 and 2017-2018) and serving on the U.S. International Trade Commission from 2003-2011, appointed by President George W. Bush. She has practiced law in State and Federal Courts in West Virginia for many years and has been admitted to practice in the Third and Fourth Circuit Courts of Appeals and the Supreme Court of the United States.

Chairman Lane has served as President of the West Virginia Bar Association, Mid-Atlantic Conference of Regulatory Utilities Commissioners (MACRUC) and the Charleston Rotary Club. She has also served on the Boards of Directors of the Rotary Foundation of Washington, D.C.; the National Association of Regulatory Utility Commissioners (NARUC); the Charleston Chamber of Commerce; the Board of Governors of the West Virginia State Bar and as a member of the West Virginia University College of Law Visiting Committee. Chairman Lane graduated from Marshall University with a Bachelor of Arts in Journalism and Political Science and received her Doctorate of Jurisprudence from the West Virginia University College of Law. She has been awarded the Justitia Officium Award from the WVU College of Law, the Distinguished Alumnus Award from Marshall University and is a Fellow of the American Bar Foundation and the West Virginia Bar Foundation. She currently resides in Charleston. Her daughter, son-in-law and two grandchildren live in South Carolina.



Commissioner Renee A. Larrick

Renee A. Larrick was appointed to the Commission in July 2017 to a full term ending June 30, 2023. She is a member of the NARUC Water Committee and of MACRUC.

Prior to joining the Commission, she served as the Business Manager for a private law firm in Beckley, West Virginia. She has also taught on the college and high school levels in Raleigh County.

Commissioner Larrick has served on the Board of Directors of the United Way of Southern West Virginia and is the past President of the Raleigh County Garden Council, the Woodcliff Garden Club and the Black Knight Country Club Ladies Golf Association.

Commissioner Larrick is a graduate of Woodrow Wilson High School in Beckley and the University of Kentucky, where she earned a Bachelor's degree in Business and Economics with a concentration in Finance. She and her husband live in Daniels, West Virginia.

Commissioner Brooks F. McCabe, Jr.



Brooks F. McCabe, Jr. was appointed to the Commission in November 2014 to fill an unexpired term and was reappointed to a full term ending June 30, 2021. He served as President of MACRUC from July 2019 – June 2020. Prior to joining the Commission, he served as a State Senator representing Kanawha County from 1998-2014, and served on the Finance, Economic Development, Pensions, Banking and Insurance, Natural Resources and Transportation and Infrastructure Committees. His 40 years in business have focused on commercial real estate with a concentration in downtown redevelopment through West Virginia

Commercial, LLC and similar business ventures.

Commissioner McCabe has served on the boards of the Charleston Renaissance Corporation, Chemical Alliance Zone, The Nature Conservancy's West Virginia Chapter, Charleston Area Medical Center, West Virginia State College Foundation, the University of Vermont and the GOW School, a private college preparatory school for dyslexic students.

Commissioner McCabe is a graduate of the University of Vermont, where he earned a Bachelor of Science in Management Engineering and a Master of Education in Education Administration. He received his Doctor of Education degree from West Virginia University, with concentration in Planning and Community Development. His professional designations include the American Institute of Certified Planners and the REALTORS® National Marketing Institute, in which he is a Certified Commercial Investment Member. He and his wife reside in Charleston and have one daughter and two grandchildren.

What the Public Service Commission Regulates

1. Electric utilities
2. Natural gas utilities
3. Landline services of telephone utilities
4. Certification of independent power producers or non-utility electric wholesale generation facilities in West Virginia, including wind, natural gas, landfill gas or other methane sources, solar, water, coal, renewable fuels and waste fuels
5. Gas and hazardous liquid intrastate transmission, regulated gathering and gas distribution
6. Private and publicly owned water and sewer utilities (limited jurisdiction over rates of municipal and larger public service district water and sewer utilities)
7. Intrastate solid waste carriers
8. Commercial solid waste facilities (landfills)
9. Safety, weight and speed limit enforcement of all commercial motor vehicles (private fleet and common carrier vehicles) operating in the state, including motor carriers involved in interstate commerce, with emphasis on high accident areas
10. Transportation of hazardous materials, including identification, registration and permitting of commercial motor vehicles transporting such materials in and through the state
11. The Coal Resource Transportation System (CRTS)
12. Administration and enforcement of Federal and State railroad safety regulations
13. Some motor carrier operations, including economic regulation of intrastate transportation of passengers (taxis and limousines) and towing services not arranged by the owner of a towed vehicle (third-party tows)
14. Middle-mile fiber broadband expansion
15. Disputes involving utility pole attachments
16. Disputes involving telecommunication carriers sharing trenches
17. Allocation of Energy Intensive Industrial Consumers Revitalization Tax Credits

Regulating During a Pandemic

2020 was a year none of us could have expected. The challenges presented to all of us through the global COVID-19 pandemic are extraordinary, but the whole world is adapting to the new normal, including here at the Public Service Commission.

The Commission recognized that, in spite of the pandemic, government must continue its work for the citizens, and that citizens have a right to participate in that process. The Commission's purpose has always been to ensure fair and prompt regulation of public utilities; to provide for adequate, economical and reliable utility services throughout the state; and to appraise and balance the interests of current and future utility service customers with the general interests of the state's economy and the interests of the utilities. This has not changed.

While we continue to redefine what regular business practices will look like in the future, the Commission and utilities around the state have struggled through the seemingly conflicting goals of ensuring quality utility service while keeping our employees safe. To do this we have taken some extraordinary steps to solve challenges that previously seemed insurmountable.

The Commission acted early in the pandemic, urging all utility companies operating in the state to immediately suspend utility service terminations except where necessary, as a matter of safety, or where requested by the customer. Most utilities immediately complied with this request. The Commission also temporarily waived the requirements that electric, gas and water utilities perform readings of meters located inside homes which required manual meter reads.

The Commission extended the Administrative Law Judge (ALJ) due dates in cases not subject to statutory deadlines by two months in order to comply with the Governor's stay at home order and give Parties an opportunity to fully participate in Commission cases.

Concerned that solid waste collectors would be spread thin because of employee absences, the Commission temporarily waived the requirement that solid waste collectors pick up bulky goods, which involves additional collection trips and the use of special equipment, and which could divert hauler resources from normal household solid waste collection.

The Commission held conference calls with the major utility companies in the state to determine the status of their operations and share best practices for operating in the pandemic. We also authorized utilities to track their additional, extraordinary costs directly related to their efforts to continue safe and reliable service during the COVID-19 emergency and defer those costs to a future proceeding.

The Commission wrote and distributed *Pandemic Preparedness Planning, a Checklist for Utilities and Other Businesses* to all utility companies operating in West Virginia.

Early on, the Commission followed and enforced the guidelines set forth by the CDC for social distancing and wearing masks. We issued strict Headquarters Building Protocols, which limited contact between employees and the public. The Commission transitioned from having 177 employees working out of the Charleston office to having 76% of them working from home in a matter of days. We did this by issuing laptops, cameras, printers and air cards; expanding access to our internal databases; and utilizing call forwarding. Technology has allowed video chats and the sharing of files between staff members, utilities and customers. Meetings previously held in person are now held by conference calls and video chats. E-learning is now a larger part of staff development. Those employees who were not able to work remotely were in a much safer work environment as the buildings were 76% less occupied. The Commission has increased the frequency of scheduled cleanings and sanitizing of the facilities.

The Commission has continued to process cases. From the time the Governor issued his State of Emergency Executive Order in March through the end of the year, the Commission issued 3,441 Orders and responded to over 9,700 requests for assistance and inquiries.

For the first time, the Commission is allowing electronic filings in formal cases, which allows Parties to observe social distancing and limits the number of people inside the Commission offices, but adds additional duties to staff's workload. We are now holding ALJ hearings telephonically and have transitioned from in-person to telephonic meetings. In-person hearings have become incredibly rare, but do occur when necessary. Much of the correspondence with outside Parties has transitioned away from printed delivery to electronic delivery. While in the building, staff is strongly encouraged to communicate through phone calls and email rather than in-person meetings.

Although many seminars conducted by the Commission's Water and Wastewater Division were cancelled, we were able to hold the mandatory seminar for new public service district board members (which they must take within six months of taking office) online.

Conducting onsite audits has been a challenge for the Commission's Utility Division. Each utility company has its own COVID-19 restrictions that must be followed by Commission staff while on site. The Utility Division has utilized online platforms to conduct meetings, hold hearings and allow staff to work remotely as much as possible.

Changes to the Commission's utility complaint processes have been almost completely transparent to the public we serve. All customer complaint calls and emails continue to be answered and cases are still worked and processed.

Despite many case-related field activities being curtailed in the early days of the pandemic, the Commission's engineering assistance staff continues to provide technical assistance to water and sewer utilities and field support for customers' complaints. All required field activities resumed for Engineering staff in June, with COVID protocols in place, including the use of personal protective equipment, social distancing, prohibiting more than one person riding in an agency car and limiting activities to outdoors whenever possible.

The Commission's Transportation Officers were issued personal protective equipment in March after West Virginia had its first confirmed case of COVID-19. Officers were also issued thermometers and are required to do daily temperature checks and record information on daily activity logs. Officers were trained to conduct the safest possible inspections, including reducing contact of documents, such as driver's licenses, registrations, bills of lading and hours of service logs.

Staff continues to permit commercial motor vehicles, monitor electronic reports of shipments of coal on the CRTS system, impose administrative sanctions for overweight shipments or the erroneous or untimely reporting of shipments, collect tonnage fees and sanctions, register shipping and receiving sites and conduct on-site inspections. The issuance of permits has been conducted either by mail or appointment. Customers are required to wear a mask and are limited to one person at a time in the building. The upcoming annual renewal of all permits is approaching and will present a challenge. Customers are encouraged to submit all paperwork in advance, by email or mail in order to process permits more timely, efficiently and safely.

The number of miles of railroad track we inspected has decreased as our inspectors have not been able to inspect tracks using a hi-rail vehicle due to COVID-19 issues. We switched from conducting in-person training and seminars to an online training platform. Interaction with railroad representatives is limited and conducted remotely, including transmission of reports via email as opposed to in person.

Utility field personnel deserve our thanks. Recognizing the importance of keeping our critical infrastructure running, this workforce was designated as essential personnel early in the pandemic. They are out there every day, making sure we have running water, electricity, gas and other services we assume will be there when we need them, particularly now that so many of us are spending much more time at home.

The Commission is pleased with the response utility companies have had to the new demands of providing service in a pandemic. Utilities have been working with customers, offering or renegotiating deferred payment agreements and working with the Commission staff to address customer complaints in a timely manner. We have heard of many cases where utilities restored service for customers who had service terminated prior to the pandemic, modified application and security deposit processes and waived delayed payment penalties and reconnection fees.

The Commission will continue to work every day to serve the people of West Virginia by processing cases, assisting customers with problems and patrolling the state highways looking for overweight and dangerous trucks and buses.

2020 Key Performance Accomplishment & Statistics

Orders	Orders Issued	5,386
	General Orders	34
Hearings	Commission Hearings	15
	Administrative Law Judge Hearings	83
	Hearings Held Outside Charleston	12
Mediation Program	Cases in Mediation Process	61
	Mediation Meetings	48
	Cases Successfully Mediated	41
Cases	Formal Cases Processed	1,878
	Consumer Questions & Inquiries Processed	2,931
	Informal Complaint Cases	7,942
	Assistance to Water and Wastewater Utilities	1,491
	Utility Audits Conducted	91
	Utility Annual Report Reviews Performed	1,045
	WVIJDC Reviews Performed	63
Seminars and Presentations	Water and Wastewater Seminars	1
	Transportation Safety Seminars	8
	People Trained at Seminars	288
	Presentations to Outside Organizations	9

	CRTS Transactions Monitored	1.2 million
	CRTS Site Inspections	525
	Complaints to CRTS Hotline Investigated	53
Highway Safety	Accidents Attributed to Overweight Coal Trucks	Zero
	Trucks Inspected	15,050
	Buses Inspected	357
	Collected for DOH Transportation Fund	\$1.6 million
	Notices of Violation Issued	238
	Collected for CRTS Violations	\$194,916
Railroad Safety	Rail Cars and Locomotives Inspected	23,450
	Defective Rail Cars Identified	1,848
	Miles Railroad Tracks Inspected	Over 1,100
	Defective Track Conditions Identified	591
	Highway Rail-Grade Crossings Inspected	357
Gas Pipeline Safety	GPS Inspections Performed	154
	GPS Inspection Days	525

2020 Significant Proceedings

Each year the Commission considers a number of significant or novel proceedings. A few of those matters from 2020 are summarized below.

Electricity

Generation Cases

Raleigh Solar I, LLC

Raleigh Solar I, LLC, filed a siting certificate application for an electric wholesale generating (EWG) facility utilizing solar energy as its fuel source (Case No. 20-0431-E-SCS). The application was filed under W.Va. Code §24-2-1o, passed during the 2020 Legislative Session, which provides a shorter time period of 150 days for approval of solar EWG projects. The project, which received wide-spread support, will generate up to 90 megawatts (MW) when completed.

Raleigh Solar estimated that the project will generate \$55 million in jobs and economic benefits to Raleigh and surrounding counties. Commission Staff (Staff) and Raleigh Solar entered into a Joint Stipulation and Settlement Agreement. The Commission approved the Joint Stipulation and granted the siting certificate, subject to certain terms and conditions. This case is now closed.

Longview Power II, LLC and Longview Renewable Power, LLC

Longview Power II, LLC and Longview Renewable Power, LLC filed a Joint Petition for the construction and operation of two EWG facilities and a high-voltage electric transmission line in Monongalia County (Case No. 19-0890-E-CS-CN). Longview II plans to build a 1,200 MW natural gas-fired electric combined cycle gas turbine (CCGT) facility, a 70 MW utility scale solar facility and associated high-voltage transmission line in West Virginia and Pennsylvania. When combined with the existing adjacent 710 MW coal-fired facility owned by Longview Power, the proposed CCGT facility and solar facility will produce nearly 2,000 MW of generating capacity.

The project's estimated construction cost is \$956 million. The project is to be located on the site of the existing Longview coal-fired facility. The State Building and Trades Council and the Sierra Club were granted intervenor status.

The Commission concluded there was a need in the Pennsylvania, Jersey, Maryland Power Pool (PJM) region for the capacity and energy that the project will provide and that it is in the public interest for West Virginia to participate in the interconnected power grid, thereby safeguarding the availability of productive, well-maintained resources to the state's residents. The Commission also concluded that the project is in the interest of the state and local economies because of the impact on local employment and significant economic gain brought about by the operation of the project.

The Commission determined that the estimated economic impact for West Virginia was \$1.13 billion with over 5,000 job-years during project construction. It also found that West Virginia ratepayers would bear no financial risks associated with the project.

The Commission granted siting certificates for the project and a certificate for the construction of an electric transmission line. This case is now closed.

Wild Hill Solar, LLC

Wild Hill Solar, LLC filed an application for a Solar Siting Certificate and a Petition for Waiver to authorize construction and operation of a 92.5 MW solar powered exempt EWG facility in Jefferson County (Case No. 20-0845-E-SCS-PW). The project will be located on approximately 795 acres of agricultural land and consist of rows of photovoltaic modules in arrays dispersed throughout the project area. The estimated cost of the project is \$125 million.

Commission Staff reviewed the application and recommended Wild Hill Solar be required to furnish more detailed drawings of transmission support for the facility, including any new structures that must be constructed to interconnect the facility to existing transmission infrastructure and submit the outstanding Affidavits of Publication.

The Commission granted the requested waiver of the requirement of Solar Siting Rule 3.5 to file information related to the project's transmission line. The Commission indicated that Staff could address the issue of plan view drawings through conversations with the Applicant or through discovery. The Commission has scheduled a public comment hearing and an evidentiary hearing (both of which will be held via videoconferences) for early 2021. This case is pending before the Commission.

Base Rate and Cost Recovery Cases

Appalachian Power Company and Wheeling Power Company Economic Development Programs

Appalachian Power Company and Wheeling Power Company (APCo/WPCo) requested

Commission approval of an Economic Development Program (Case No. 19-0387-E-PC). Under the terms of the Joint Stipulation in its previous base rate case (Case No. 18-0646-E-42T) the Companies agreed to work with the West Virginia Department of Commerce to create economic incentive programs that would provide funds to aid industrial customers in its West Virginia service territories. These programs were to be funded by a combination of customer service fees and matching contributions from the Companies. The program would support four types of projects, including economic development agency support projects, workforce training, site development and marketing and promotional projects. The Companies proposed collecting \$670,000 through a surcharge of 12-cents per month per metered retail customer and matching that with Company contributions.

The Commission's Consumer Advocate Division (CAD) and the West Virginia Energy Users Group (WVEUG) intervened in the case. Based on the Companies' 2018 customer accounts, the proposed meter charge would apply 84% of the charges to the residential class. CAD objected to the charge to residential customers. Staff recommended that the customer contribution be collected on a more equitable basis; that the Companies be required to equally match or exceed customer contributions; and that the Companies be required to report on the amount of customer contributions, the Companies' contributions and program results. WVEUG recommended that the request for customer contributions be denied and that the Companies be required to provide \$1 million of funding to match the \$1 million of Federal Tax Cuts and Jobs Act (TCJA) money provided by the customers to fund the Companies' Economic Development Fund (EDF).

The Parties filed a Joint Stipulation in which they agreed to utilize \$500,000 of remaining TCJA funds, which the Companies will match dollar for dollar, to fund the EDF; that the fund will have program budgets of \$500,000 a year for 2020 and 2021; and that the Companies may make a filing to continue the EDF beyond 2021.

The Commission approved a modified Joint Stipulation, but expressed concern that the level of program funding agreed to through the Joint Stipulation was inadequate. The Commission approved program funding of \$1.2 million per year for a two-year trial period and authorized the Companies to collect the proposed meter charge to provide the funding for the program budget. The Commission concluded that in order to stimulate economic growth, funding for the annual EDP should be maintained at \$1.2 million per year, as originally proposed, and that the Companies should contribute, without rate impact to the customers, \$530,000 per year, as originally proposed. The Commission also authorized the Companies to charge \$670,000 to the TCJA account as a customer-funded offset to the \$1.2 million of annual funding. The Commission restricted use of the program's funds so that \$700,000 per year can only be used for the site development category of economic development activities. Finally, the Commission ordered the Companies to file quarterly reports showing the progress of the Commission approved economic development programs. The case is now closed.

Appalachian Power Company and Wheeling Power Company ENEC

APCo/WPCo filed a petition to initiate a review and update of their Expanded Net Energy Cost (ENEC) rates, proposing to increase the ENEC rates to recover an additional \$82 million in annual revenues (Case No. 20-0262-E-ENEC). The ENEC rate review is a narrow special purpose rate proceeding for electric utilities that allows recovery of certain prudently incurred costs for fuel, purchased power, purchased transmission costs and construction costs for specific projects.

The Companies stated their adjusted ENEC under-recovery balance was approximately \$50 million as of December 31, 2019. It proposed a new Tax Reform Rider (TRR) rate in effect from July 1, 2020 through June 30, 2021, in order to flow back to customers the remaining unrestricted balance of the Companies' unprotected excess accumulated deferred federal income tax of approximately \$52 million. The Companies proposed two alternatives for changing the treatment for the PJM Open Access Transmission Tariff (OATT) revenues in ENEC proceedings, including a proposal of a Transmission Infrastructure Charge (TIC) to recover all transmission investment capital invested by the Companies beginning January 1, 2020. Finally, the Companies requested ENEC rate recovery of default charges assessed by PJM against the Companies related to the default of GreenHat Energy, LLC. The Commission granted intervenor status to CAD, WVEUG and Steel of West Virginia (SWVA).

The Parties submitted a Joint Stipulation agreeing in part that (i) the proposed ENEC rate increase would be reduced by approximately 39% and implemented on September 1, 2020; (ii) the stipulated ENEC rates would collect an additional amount of approximately \$50.1 million from September 1, 2020 through June 30, 2021; (iii) the excess unprotected accumulated deferred federal income tax (EUADIT) balance for the residential class of approximately \$10.5 million would be credited back to customers via new TRR rates effective over the same period; (iv) the TRR credit rates would be credited back to customers based on actual electricity consumption during the 10-month period; (v) the Green Hat default charges would be recoverable through the ENEC; (vi) the Companies should file their 2021 ENEC on or before March 1, 2021; (vii) proposed 2021 ENEC rates would be effective on or after July 1, 2021; and (viii) the years covered by this ENEC would be subject to audit and discovery in the 2021 filing.

The Commission adopted the Joint Stipulation in part. The Commission ordered that (i) the 2021 ENEC case be filed between April 15, 2021 and April 30, 2021; (ii) effective September 1, 2020, the Companies should implement revised ENEC rates and TRR credit rates; (iii) in order to accommodate a revised future filing date of the annual ENEC and VMP and continue the cycle of a full 12-month ENEC and VMP rate period, these rates should remain in effect until August 31, 2021; and (iv) to the extent that the amounts billed through the TRR credit rates for the 12-month period ending August 31, 2021, exceeded the EUADIT balance, the Companies should debit ENEC revenues for that amount. This case is now closed.

Appalachian Power Company and Wheeling Power Company Vegetation Management Program

APCo/WPCo filed their 2020 Vegetation Management Program (VMP) review and VMP surcharge true-up, requesting to increase the surcharge rates by an additional \$108.6 million (Case No. 20-0261-E-P). The VMP is designed to complete end-to-end vegetation management on all Company distribution and transmission circuits of less than 200kV. The Companies stated their VMP under-recovery was approximately \$40.37 million as of December 31, 2019, that the proposed rate increase included the recovery of the increased cost of performing the VMP on a four-year cycle rather than the six-year transition period and the under-recovery of VMP costs. The requested VMP surcharge rate represents an increase of \$70.2 million or 183.3% over the current VMP surcharge rates. The Companies project that current VMP rates will produce \$38.3 million and are proposing an annual revenue requirement of \$108.5 million. Intervenor status was granted to CAD and WVEUG.

The Parties submitted a Joint Stipulation reducing the proposed VMP rate increase by approximately 43% and deferring the new rate for two months, resulting in an increase of VMP rates of approximately \$40.3 million to be in effect September 1, 2020 through June 30, 2021. Considering the pandemic, economic circumstances and a \$50.4 million under-recovery of VMP costs (as of March 31, 2020), the Parties requested that the Commission delay the transition from the six-year VMP cycle to the four-year cycle, allowing the Companies to perform vegetation management of approximately one-sixth of the system by mid-2021. The Joint Stipulation anticipated the Companies would file the 2021 VMP case on or before March 1, 2021 and for VMP rates to become effective on or after July 1, 2021.

The Commission adopted the Joint Stipulation with certain modifications. The Commission ordered the 2021 VMP case be filed between April 15, 2021 and April 30, 2021; that effective September 1, 2020, the Companies should implement the stipulated VMP rates; and that in order to accommodate a revised future filing date for the annual ENEC and VMP and continue the cycle of a full 12-month ENEC and VMP rate period, these rates should remain in effect until August 31, 2021. This case is now closed.

Appalachian Power Company Petition for Non-Standard True-Up

APCo filed a petition for a nonstandard true-up to adjust consumer rate relief charges authorized under the terms of the Financing Order in Case No. 12-1188-E-PC (Case No. 20-0583-E-P). That Financing Order granted permission to securitize certain expanded net energy costs, authorized the issuance of consumer rate relief (CRR) bonds and approved and authorized the imposition, charging and collection of CRR charges in an amount to be calculated and adjusted from time to time (as provided in the Financing Order) that would be sufficient to pay the debt service on the CRR bonds, together with related ongoing

financing costs. The Financing Order required that if one of the CRR revenue groups established by the Financing Order experienced a 10% or more drop in the consumption of electricity, then APCo would be required to make a filing to establish a non-standard true-up of CRR charges.

APCo reported a 14.74% decrease in electricity consumption for the commercial CRR revenue group and submitted proposed allocation factors based on the relative energy forecast for each CRR revenue group for October 2020 through September 2021 to adjust for this projected drop in consumption.

WVEUG and CAD were granted intervenor status. WVEUG proposed alternative allocation factors that would result in a more uniform distribution of CRR charges among the Industrial CRR revenue group without affecting the allocation of charges to other CRR revenue groups. Staff and APCo proposed that APCo file a non-standard true-up with its 2021 standard true-up if the changes in the CRR revenue group consumption giving rise to the current non-standard true-up proceeding are reversed in the 12-month period beginning October 1, 2020, to the extent permitted by law, the Commission's Securitization Order and the bonds' indenture and servicing agreement. None of the Parties objected to these proposals.

The Commission approved the CRR charges proposed by APCo as modified by the WVEUG alternative allocation factors and required APCo to file revised tariff sheets reflecting the approved CRR charges for all service rendered as of October 1, 2020. The Commission also ordered APCo to file a non-standard true-up with its 2021 standard true-up in the event that the changes in the CRR revenue group consumption giving rise to the current non-standard true-up proceeding are reversed in the 12-month period beginning October 1, 2020, to the extent such a non-standard true-up is permitted by law, the Commission's Securitization Order and the Companies' bonds' indenture and servicing agreement. This case is now closed.

Monongahela Power Company and the Potomac Edison Company ENEC and Modernization and Improvement Program for Coal-Fired Boilers

Monongahela Power Company and the Potomac Edison Company (Mon Power/PE) filed a petition to initiate a review of its ENEC rates (Case No. 20-0665-E-ENEC). The Companies proposed to decrease ENEC rates by approximately \$55 million, a 4% decrease in total rates. The Companies state the proposed ENEC rates include a June 30, 2020, cumulative ENEC rate over-recovery balance of \$29.3 million and a projected ENEC over-recovery of approximately \$43.6 million, based on current ENEC rates. The proposed ENEC rates include continued recovery of boiler modification capital cost for 2016 and 2017 for Mercury and Air Toxics Standards (MATS) and the Companies' Cross-State Air Pollution Rule II (CSAPR) compliance in the amount of \$7.4 million for 2021 and recovery

of a COVID-19 regulatory asset of \$10.5 million.

The Companies made a simultaneous filing requesting approval of a modernization and improvement program (MIP) for coal-fired boilers and approval to implement a cost recovery surcharge (Case No. 20-0666-E-4435T). The Companies are proposing air emission reduction projects for MATS/CSAPR requirements, and effluent guideline water limitation compliance at the Harrison and Ft. Martin power stations. The Companies are proposing surcharge rates to recover an annual increase of \$4.96 million during 2021 for the program's cost. That represents an additional revenue requirement increase of 0.4% in the Companies' West Virginia jurisdictional revenues.

The Companies indicated that since all of the expenditures in their MIP are related to achieving compliance with governmental environmental requirements, they cannot predict long term needs since the final mandates of such environmental regulations are not known at this time. The Companies stated that once the regulatory uncertainties become known, they will either amend their existing MIP filing to include new projects or include the new projects in their periodic MIP filings.

The overall revenue impact of the two cases is a reduction in revenue of \$50 million, or a 3.7% decrease in total rates. The Companies requested that these two matters be considered on the same procedural schedule so that rates would only change once on January 1, 2021.

The Commission granted CAD, WVEUG, West Virginia Citizens Action Group and Solar United Neighbors (CAG/SUN), the Sierra Club and Appalachian Mountain Advocates intervenor status.

The Parties submitted a Joint Stipulation that provided for the withdrawal of Case No. 20-0666-E-4435T, with the issues in that matter being addressed in the agreed upon rates in Case No. 20-0665-E-ENEC. The withdrawal of the 4435T case was to be without prejudice to the Companies making future 4435T filings that do not seek to recover the specific costs addressed in the Joint Stipulation.

The Parties agreed to: (i) close the review periods ending July 1, 2019, to June 30, 2020, in the ENEC case; (ii) effective January 1, 2021, the Companies will implement the revised ENEC rates designed to produce an annual decrease of \$50 million, or 3.7% in total rates on a system average basis, subject to a reservation of \$5 million of the residential rate reduction portion of the ENEC rate decrease in this case to apply toward and against the residential portion of the regulatory asset in any future ENEC or other rate proceeding in which the Companies seek to recover additional portions of the COVID-19 regulatory asset; (iii) the ENEC rates implemented on January 1, 2021, will remain in effect for one year; and (iv) the Companies will file their next ENEC case on or before September 1, 2021.

The components of the ENEC rates agreed to by the Parties include (i) the \$29.3 million over-recovered deferred fuel balance as of June 30, 2020; (ii) the projected ENEC over-

recovery of \$43.58 million, based upon current ENEC rate levels for calendar year 2021 (adjusted to account for the reduction in current income tax expense resulting from the TCJA settlement approved in General Order No. 236.1) less the \$5 million reserve for residential customers; (iii) an annual revenue requirement of \$7.4 million for MATS/CSAPR capital costs booked during 2016 and 2017 as authorized in the settlement of the 2016 ENEC case approved in Case No. 16-1121-E-ENEC; (iv) the collection of \$10.5 million of COVID-19-related incremental costs incurred as of June 30, 2020; and (v) an annual revenue requirement of \$4.9 million of MATS/CSAPR actual and forecast capital costs for 2018 through 2021, which also includes forecasted operation and maintenance costs, and which reflects the reduction of the agreed upon property tax expense recovery and also a return on common equity of 9.9%.

The Commission approved the Joint Stipulation and a decrease of \$50 million, or 3.7%, of the Companies' ENEC rates. These cases are now closed.

Monongahela Power Company and the Potomac Edison Company LED Street Lighting

Mon Power/PE requested to add lighting emitting diodes (LED) to their existing outdoor/streetlight lighting options (Case No. 20-0461-E-T). The Companies state that their LED proposal is cost-based and provides customers with new voluntary outdoor lighting options that are more energy efficient than present offerings. The Commission granted intervenor status to CAD, Energy Efficient West Virginia (EEWV) and CAG.

The Commission approved the Companies' proposal to offer more energy efficient LED outdoor lighting to their customers, but modified the proposed tariff to reduce the rates and removed a one-time charge for converting existing outdoor lighting, which would have disincentivized customers to convert existing lighting facilities to LED luminaires. Removal of the conversion charge and lower rates will reduce budget barriers and provide an incentive to encourage the use of more energy efficient lighting. This case is now closed.

Black Diamond Power Company Purchased Power Cost

Black Diamond Power Company filed an application with the Commission for an increase in its consolidated purchased power surcharge (Case No. 20-0588-E-P). Commission Staff recommended a consolidated purchased power surcharge that would result in a \$217,012 annual increase. The Parties filed a Joint Stipulation agreeing to the Staff's proposed purchase power rate. The Commission approved the Joint Stipulation. This case is now closed.

Miscellaneous Electric Cases

Appalachian Power Company and Wheeling Power Company Reliability Index Targets

APCo/WPCo filed a petition to maintain their Reliability Index Targets previously approved by the Commission in Case No. 18-0588-E-PC (Case No. 20-0368-E-PC). Staff did not object to the Companies' request to extend their Reliability Index Targets, but recommended that the Companies be required to file for a formal evaluation of whether their current reliability targets should be maintained or changed by May 1, 2022. This case is pending before the Commission.

Monongahela Power Company and the Potomac Edison Company Reliability Index Targets

Mon Power/PE filed a petition to maintain Reliability Index Targets previously approved by the Commission in Case No. 18-0580-E-PC for 2021-2025 (Case No. 20-0357-E-PC). Staff supports the Companies' request. This case is pending before the Commission.

Appalachian Power Company v. City of Keystone

In 2014, APCo filed a complaint with the Commission regarding a billing dispute against the City of Keystone (Case No. 14-1256-E-C). At that time, APCo stated that Keystone owed the Company \$39,932: \$30,962 for Keystone Water; \$4,978 for City Hall; and \$3,992 for the street light account. The Commission made McDowell County PSD a respondent in the case and granted intervenor status to the U.S. Department of Agriculture (USDA). In December 2014, Keystone agreed to pay each current monthly bill plus \$400 on the arrearage of its electric accounts.

The Commission ordered APCo to file quarterly billing and payment histories for the three Keystone accounts. In October 2018, the Commission closed Case No. 14-1256-E-C because payments were being made to APCo and the arrearage was decreasing.

In October 2020, APCo reported that Keystone owed \$48,730 for the three electric accounts and had only made four payments to the streetlight account, five payments to the Keystone Water account and three payments to the City Hall account since December 2019. The Commission re-opened the 2014 case and held a hearing.

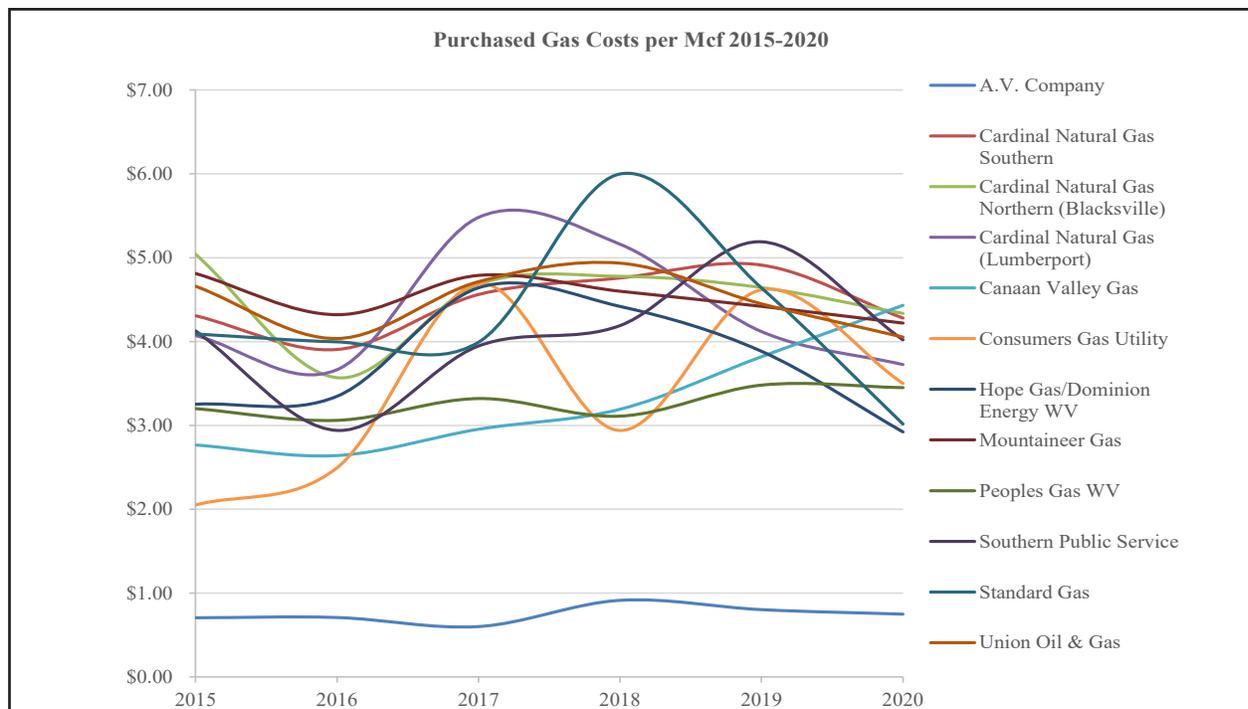
Meanwhile, the Commission has approved a certificate application by McDowell County PSD to construct the Elkhorn II Project to expand its facilities and extend water service to the customers of Keystone (Case No. 19-0393-PWD-CN). The certificate project does not anticipate transfer of Keystone's debts or facilities. The 2019 certificate case is closed but the 2014 complaint case is pending before the Commission.

Natural Gas

Purchased Gas Adjustment Cases

Natural gas utilities are required to file 30C cases annually to reflect changes in the purchased gas component of their rates. The cost of purchased gas is, on average, slightly less than half of typical residential natural gas utility charges. The prices that natural gas utilities pay their suppliers for gas are not regulated by the Commission or the Federal Government, but are determined by the national market. During recent years, the market-driven price has been volatile, largely resulting from the availability of Marcellus and Utica gas in the market and other external factors. The Commission has ordered the following interim gas rates for the winter of 2020-2021.

Company	2015	2016	2017	2018	2019	2020
A.V. Company	\$0.71	\$0.71	\$0.60	\$0.91	\$0.802	\$0.748
Cardinal Natural Gas Southern	\$4.31	\$3.91	\$4.56	\$4.76	\$4.9119	\$4.2797
Cardinal Natural Gas Northern (Blacksville)	\$5.04	\$3.57	\$4.68	\$4.78	\$4.644	\$4.336
Cardinal Natural Gas Northern (Lumberport)	\$4.07	\$3.66	\$5.48	\$5.16	\$4.119	\$3.725
Canaan Valley Gas	\$2.77	\$2.64	\$2.95	\$3.19	\$3.819	\$4.432
Consumers Gas Utility	\$2.05	\$2.49	\$4.69	\$2.94	\$4.617	\$3.50
Hope Gas/Dominion Energy WV	\$3.25	\$3.35	\$4.64	\$4.42	\$3.884	\$2.922
Mountaineer Gas	\$4.81	\$4.32	\$4.79	\$4.60	\$4.42	\$4.22
Peoples Gas WV	\$3.20	\$3.06	\$3.32	\$3.11	\$3.48	\$3.45
Southern Public Service	\$4.13	\$2.94	\$3.95	\$4.19	\$5.19	\$4.02
Standard Gas	\$4.09	\$4.00	\$3.99	\$6.00	\$4.64	\$3.016
Union Oil & Gas	\$4.66	\$4.04	\$4.71	\$4.94	\$4.45	\$4.053



Infrastructure Replacement and Expansion Plan Cases

In 2015, the West Virginia Legislature passed Senate Bill (SB) 390 authorizing the Commission to approve Infrastructure Replacement and Expansion Plans (IREP), an expedited cost recovery for natural gas utility infrastructure projects through the use of a surcharge that would be outside the purview of a base rate case.

Mountaineer Gas Company

Mountaineer Gas Company's 2021 IREP proposed investing \$262 million over five years, including \$47.5 million in 2021 (Case No. 20-0575-G-390P). The Company intends to continue its current IREP and increase its level of investment for the replacement of unprotected or inadequately protected bare steel by \$2.5 million to achieve a replacement rate of 20-30 years, rather than the current replacement rate of 75 years, which Mountaineer considers unsuitable to sustain a safe, reliable and efficient system. Some of Mountaineer's bare steel pipeline was installed in the late 1800s. CAD and the Independent Oil and Gas Association (IOGA) were granted intervenor status.

The Parties submitted a Joint Stipulation recommending a \$10.75 million IREP revenue requirement, including a \$1.2 million under-recovery balance for 2019. The Commission approved the Joint Stipulation. This case is now closed.

Hope Gas, Inc., dba Dominion Energy West Virginia

The 2021 IREP application filed by Hope Gas, Inc. dba Dominion Energy West Virginia (Hope) included a rolling five-year plan of infrastructure improvements, including \$53.9 million in 2021 (Case No. 20-0414-G-390P). The Company's proposed IREP rates reflect an annual revenue requirement of \$13.8 million, an increase of 30.12% over current IREP rates. The Company is in its second year of increasing investment and staffing to reach a 24-year cycle for replacement of bare steel distribution mains and unprotected and ineffectively-coated steel distribution mains.

The Commission approved Hope's IREP investment for 2020 and 2021, allowing the Company to recover approximately \$12.7 million annually in IREP rates effective November 1, 2020. This case is now closed.

Union Oil & Gas, Inc.

In its 2021 IREP filing, Union Oil & Gas, Inc. noted that it had completed its connection to TransCanada's Mountaineer Xpress Pipeline at a final cost of \$1.9 million, approximately

\$320,000 less than the Company's revised estimate (Case No. 20-0265-G-390P). The Company reported an under-recovery of \$46,472 collected from the IREP rate for July 20, 2018 through June 2019.

The Company and Staff filed a Joint Stipulation that included an under-recovery of \$28,564 and a new annual revenue requirement of \$241,762. The Commission approved the Joint Stipulation, closing the case.

Cardinal Natural Gas Company (Southern Division)

In its 2021 IREP filing, Cardinal Natural Gas Southern Division proposed investing approximately \$1.8 million for infrastructure replacement and system upgrades from November 2020 through October 2021 with an additional investment of \$9.4 million between 2022 and 2026 (Case No. 20-0418-G-390P). Commission Staff recommended rate increments that would result in an additional annual revenue requirement of \$732,656; \$11,582 less than that proposed by Cardinal.

The Parties filed a Joint Stipulation proposing a \$744,238 total increase in Cardinal's IREP revenue and an allocation of the new revenues among the customer classes. The agreed upon IREP rates were the original rates requested by Cardinal.

The Commission approved and adopted the Joint Stipulation. This case is now closed.

Farm Tap and Abandonment Cases

Farm Tap Cases

The Commission initiated a General Investigation (GI) to consider proposals for consumer protections, farm taps and filing requirements for IREP cases filed by natural gas utility companies (Case No. 19-0004-G-GI). The Parties, including Mountaineer Gas Company, Hope Gas, Cardinal Natural Gas Company, Union Oil & Gas, WVEUG, CAD and Staff, filed a Joint Proposal, which was approved with modifications by the Commission. This case is now closed.

Staff filed a petition to open a separate GI into the continuation of natural gas utility service to farm tap customers and areas supplied by and dependent on conventional natural gas production field taps (Case No. 19-0467-G-GI). In its Order opening the GI, the Commission joined all natural gas utilities and IOGA as respondents. The West Virginia Surface Owners Rights Organization (WVSORO) was not made a respondent and did not intervene, but did file comments.

The Commission ordered the gas utilities to provide information on their farm tap customers, including the number of customers, whether any customer would lose gas service in 2019 and potential solutions for serving farm tap customers.

The Commission later closed the GI, but required further reporting from the utilities. The Commission concluded that because of the many factors involved in the relevant gas supply issues and the variety of possible solutions, only a targeted case-by-case or area-by-area approach to resolving those issues was appropriate. The Commission noted that Mountaineer Gas, Hope Gas and Peoples Gas are all currently addressing gas supply issues in different ways. Mountaineer has pursued abandonment in numerous cases pending before the Commission. The Commission discussed Mountaineer's process of determining a reliable source of gas and laying distribution lines to the existing distribution system or farm tap and Peoples Gas' suggestion of making new connections. The Commission also mentioned incentives for drillers to achieve higher production volume as a potential solution and acquisition of third-party pipelines, which Hope is pursuing.

The Commission emphasized that abandonment is the least preferred solution, but in the July 2020 filings a number of the natural gas utilities reported some customers are in danger of a complete loss of service or problems related to low production or pressure.

This case is now closed, but the reporting requirements placed on the gas utilities remain in effect until further Order of the Commission.

Hope Gas, Inc. dba Dominion Energy West Virginia Acquisition of Facilities

Hope filed an application to acquire certain facilities from its affiliate, Dominion Gathering & Processing, Inc. (DGP) (Case No. 19-0549-G-PC). DGP operated a gathering system for local producers that also provided direct and indirect gas service to approximately 9,800 of Hope's farm tap customers. Hope will operate the gathering system as part of its regulated operations, with producers paying a fee pursuant to existing gathering contracts assumed by Hope upon closing of the transaction.

Following an evidentiary hearing, the Commission approved the acquisition. This case is now closed.

Peoples Gas WV, LLC, Equitrans and Essential Utilities Continuation of Natural Gas Service to Field Tap Customers of Equitrans Gathering Facilities

Petition to Initiate a General Investigation into the Abandonment of Equitrans L.P. Gathering Facilities and Services and Continued Gas Service to Field Tap Customers

Hope Gas, Inc. dba Dominion Energy West Virginia Petition to Abandon 834 Customers

Peoples Gas WV, LLC (PGWV) filed a Petition pursuant to the Commission's Final Order in Peoples Gas WV, LLC and Aqua America, Inc. Case No. 18-1475-G-PC and requested the Commission consider the continuation of natural gas service to PGWV's field tap customers from Equitrans L.P.'s low pressure gathering system (Case No. 20-0329-G-P). PGWV included a report prepared by Black & Veatch Management Consulting, LLC (B&V) that assessed the short- and long term feasibility of the gathering system providing reliable service to PGWV's customers. PGWV said it served approximately 2,500 field tap and 1,000 other customers from the gathering system.

Equitrans responded to PGWV's petition, stating the Commission lacked jurisdiction over Equitrans and the gathering system. It asserted the B&V report supported PGWV immediately acquiring the gathering system. Equitrans further stated it had a petition filed with the Federal Energy Regulatory Commission (FERC) to abandon its entire West Virginia Gathering System, not only the portions providing gas access to PGWV.

The Commission concluded that PGWV, Aqua America, Inc., now known as Essential Utilities, Inc., and Equitrans could not discontinue natural gas service to any field tap or distribution system customer served by the gathering system without first obtaining Commission authorization. The Commission joined Essential Utilities and Equitrans as Parties to the proceeding. CAD and IOGA were granted intervenor status.

Staff filed a petition to institute a GI into Equitrans' abandonment of the gathering system and the continued gas utility service to impacted field tap customers (Case No. 20-0454-G-P). In its petition, Staff stated that Hope, Mountaineer and PGWV serve approximately 6,000 gas utility customers, directly or indirectly, from the gathering system. Staff said the three Local Distribution Companies (LDC) will continue to rely on the gathering system to serve customers until Equitrans abandons its customers or until the LDCs receive Commission approval to abandon their customers. Staff requested the Commission initiate a GI; join Equitrans, the LDCs and IOGA as Parties; and require the Parties provide specific information to aid the Commission in their assessment of the gas supply issue.

Hope requested Commission authority to abandon service to approximately 834 customers due to Equitrans' plan to abandon its gathering system that served those customers (Case No. 20-0660-G-X). In its filing, Hope noted that Mountaineer and PGWV are also affected by Equitrans' intent to abandon its gathering system. Hope stated it was interested in the potential acquisition of portions of the gathering system to continue service to its customers,

but stated it needed more time to conduct proper due diligence. Hope and the other LDCs are working together to determine if other distribution lines are available to serve impacted customers. Hope also said that ultimately, if it is prudent to abandon service, it could take a year or more to convert impacted customers to alternate fuel.

The Commission has consolidated Case Nos. 20-0329-G-P; 20-0454-G-P and 20-0660-G-X and they are pending before the Commission.

Abbreviated Application of Equitrans L.P. for Order Authorizing Abandonment of Gathering Facilities and Services

Equitrans filed an abbreviated application with FERC for approval to abandon gathering facilities and services using a two-step process (FERC Docket No. CP20-312-000). As part of the two-step process, Equitrans stated that it will attempt to abandon the gathering facilities by sale and, if that is not successful, Equitrans will abandon the gathering facilities in place.

Equitrans requested approval to abandon 877 miles of pipeline and nine compressor stations in Braxton, Doddridge, Gilmer, Harrison, Marion, Marshall, Monongalia, Ritchie, Taylor, Tyler, and Wetzel counties in West Virginia. The gathering facilities consist of certificated and non-certificated facilities. The certificated facilities in West Virginia include four compressor stations with seven compressor station units and approximately 140 miles of pipelines. The non-certificated facilities include approximately 736 miles of pipelines and nine compressor station units.

Equitrans stated that it does not intend to immediately abandon services once it receives FERC approval. However, Equitrans reserves the right to file the 30-day notices to abandon assets and services for the non-certificated facilities during the pendency of the case and for the one year period following the FERC Order.

Equitrans requested that FERC follow the approach taken in past proceedings and approve a two-step abandonment process for the certificated facilities. Under this two-step process, the requested abandonment authorization would be effective as of the date of the FERC Order and would remain in effect for one year. The abandonment authorization would be conditioned on Equitrans submitting an implementation plan within that one-year period that reflects how it will implement the abandonment of the assets (by sale, in place or both), and FERC's Office of Energy Projects approving such plan.

The Public Service Commission intervened and filed comments advising FERC of Equitrans' responsibilities for operation of the gathering facilities and that the assurance of continuity of service to customers receiving natural gas service through those gathering facilities has been an issue in previous cases at the Commission. Pursuant to Commission Orders issued in 2007, 2013 and 2018 and written agreements with conditions contained in those Orders, Equitrans may not discontinue service to any customer served by the

gathering facilities without the approval of the Commission. The Commission requested that FERC note the commitment for continued service to which Equitrans is bound and condition any abandonment on Equitrans' assurance that alternative arrangements are in place for continuance of gas service currently being provided by the gathering facilities. Equitrans has taken issue with the requirement that Commission approval is necessary for abandonment of the gathering facilities.

IOGA, PGWV, and Hope Gas intervened and filed protests to Equitrans' Application. CAD intervened and filed comments. The Independent Oil and Gas Association of Pennsylvania, WVSORO, American Gas Association and Antero Resources Corporation have also intervened.

The case is pending a FERC Order on the Equitrans Application.

Miscellaneous Gas Cases

Hope Gas, Inc. dba Dominion Energy West Virginia Base Rate and Depreciation Cases

Hope filed an application to increase its base rates by \$34.6 million annually, or approximately 31% (Case No. 20-0746-G-42T). The proposed increase would include an offsetting reduction in the Company's IREP surcharge rates that will occur when the new base rates go into effect and the additional revenue from producers under the Company's new Production and Gathering Aggregation Service (PGAS) Rate Schedule.

The Company also filed an application to adjust its depreciation rates (Case No. 20-0745-G-D). The Commission has set a procedural schedule and these cases are pending before the Commission.

Hope Gas, Inc. dba Dominion Energy West Virginia Waiver of Commission Rules

Hope filed a petition requesting the Commission waive certain requirements under the Rules for the Government of Gas Utilities and Gas Pipeline Safety relating to the service fee on deferred payments and renegotiation of deferred payment arrangements (Case No. 20-0391-G-P).

Hope stated it had suspended all service disconnections for non-payment on accounts receivable in response to the COVID-19 pandemic. The Company requested the waivers because of concern these actions may violate the Commission's Gas Rules and the provisions of Hope's tariff.

The Commission granted the waiver of the service fees. This case is now closed.

Gas Pipeline Safety

The Gas Pipeline Safety (GPS) Division oversees pipeline safety compliance for 96 gas and hazardous liquid pipeline operators with approximately 14,000 miles of intrastate pipeline. The Division oversight includes intrastate gas and hazardous liquid transmission and regulated gathering pipelines as well as gas distribution pipelines.

Type of Pipeline Miles in West Virginia						
Year	Hazardous Liquid ¹	Gas Transmission (Intrastate)	Regulated Gas Gathering ²	Gas Distribution		Total
				Mains	Services	
2019	188	170	400	11,007	2,237	14,002
2018	151	168	399	10,961	2,282	13,974
2017	164	170	388	10,906	2,280	13,908
2016	230	170	399	10,883	2,262	13,944
2015	322	221	414	10,850	2,431	14,238
1. Mileage includes both transmission and gathering						
2. Reported mileage may not represent all regulated gathering						

Yearly variations in mileage occur as operators re-evaluate their pipelines according to regulations, changes in ownership, new construction and abandonment of old pipelines. Many production and gathering operators do not fall under GPS oversight and some operators do not understand the requirement to review their lines and determine changes in regulatory status. The ongoing surplus of natural gas in the state continues to cause problems. Changing philosophies regarding gathering and midstream assets has resulted in many changes of ownership as operator divestiture of underperforming pipelines has created both a consolidation of operators and an increase in operators with small regulated pipeline mileage. Proposed Federal gas gathering line regulations may drastically increase both the mileage and number of operators for gas gathering pipelines.

Commission Regulated Pipeline Operators					
Year	Hazardous Liquid	Gas Transmission ¹	Gas Gathering ¹	Gas Distribution ²	Master Meters
2019	5	12	30	16	33
2018	5	12	29	16	35
2017	5	16	27	16	35
2016	6	12	19	21	36
2015	5	10	28	21	36

1. Gas transmission operators with gathering pipelines are counted as both transmission and gathering operators
2. Includes liquid propane operator

The COVID-19 pandemic created a number of new challenges for the GPS Division in 2020. GPS oversight of operators requires in-person visits to review records and written procedures and to perform onsite inspections of pipeline facilities. Many operators have shut their offices and sent personnel home to work. Using available technology, GPS moved to virtual inspections. While the virtual inspections allowed a means to continue to monitor operators, they cannot replace the on-site, in-person evaluation. In 2020, the GPS Division performed 154 scheduled inspections that included operations and maintenance, integrity management, operator qualification and drug and alcohol plans, with 61 of those inspections performed remotely. The GPS Division investigated one reportable incident during the year. In addition to scheduled inspections, GPS inspects construction activities to ensure compliance with the design and construction safety regulations. In 2020, GPS inspectors spent 525 days performing inspections, with 304 days being done in a virtual format.

Inspection Performance			
Year	Inspections	Inspectors	Inspection Days
2020	154	4 full time	525
2019	178	4 full time	516
2018	137	2 full, 3 part time	439
2017	120	4 full, 2 part time	547

Funding

The GPS Division is funded by a federally mandated pipeline assessment fee, paid by operators. The Federal money available for the funding of state pipeline safety programs is established by the periodic reauthorization of the U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA). PHMSA is currently operating under a continuing resolution until a new reauthorization bill is passed. The

amount of money available to states is dictated by the reauthorization, but is reduced from previous years. As a requirement of the Federal grant, the GPS Division must follow the *2020 Guidelines for States Participating in the Pipeline Safety Program* that details the requirements for the types of inspections, reporting requirements, staffing levels and other criteria. GPS is subject to an annual program review, the results of which affect the amount of Federal funding it receives. The program is also subject to a three-year audit to insure monies are spent appropriately.

Year	Total Eligible Grant Expenditures ¹	Actual Grant Reimbursement	Percentage Reimbursed
2021	\$996,742 ²	TBA	TBA
2020	\$1,020,440 ²	TBA ³	TBA ³
2019	\$759,633	\$470,345	61.90%
2018	\$639,060	\$476,901	74.62%
2017	\$775,891	\$531,844	69.53%

1. Includes both gas and hazardous liquid reimbursement. Hazardous liquids are about 5% of total funding, gas is 95% of funding. Represent actual spending by GPS

2. Estimates submitted September 2019 for CY 2020. Submitted September 2020 for CY 2021

3. Actual grant reimbursement for 2020 based on documents to be submitted in February 2021

Training

All GPS inspectors are required to receive training on Federal pipeline regulations at the PHMSA Training Facility, in Oklahoma City, Oklahoma. Six initial classes must be completed within three years in order for an inspector to be considered a minimally trained gas pipeline safety inspector. Inspectors must meet minimum requirements prior to being allowed to inspect pipelines with additional training required for hazardous liquid inspectors. Advanced level courses include integrity management, control room management and root cause analysis. The GPS Division is required to have some inspectors trained in all aspects of pipeline safety and all classes. Training costs approximately \$2,000 per class per inspector and is primarily paid by a Federal grant. The cost to send an inspector to all classes is approximately \$60,000.

Staffing

PHMSA guidelines state GPS should have seven inspectors in order to provide adequate inspection and oversight of the current number of operators and miles of regulated gas and hazardous liquid pipelines in West Virginia. GPS hired two additional inspectors late in 2018 (who completed their initial training in 2020) and is in the process of filling additional positions, but the Division continues to struggle to meet the required staffing level. It is difficult for the Division to maintain appropriate levels of staffing because of the state of the

oil and gas industry and low State salary guidelines. Once inspectors become trained, they are frequently hired by private companies at a 50-100% salary increase. Additional Federal mandates and regulatory changes will require even more inspectors in the near future.

One-Call Program

PHMSA issued new Federal damage prevention regulations to strengthen the protection of underground pipeline facilities by allowing PHMSA to take enforcement actions against contractors violating the One-Call regulations. GPS continues to work with WV811 to educate the public and ensure compliance with the State One-Call laws.

State damage prevention enforcement regulations became effective July 1, 2018, creating the 10-member Underground Facilities Damage Prevention Board to review violations of the State One-Call law. Although the appointed board has developed guidelines and the first enforcement actions took place during 2020, PHMSA has not yet determined that West Virginia damage prevention enforcement is adequate. The Commission has no authority over the Board and damage prevention enforcement, but the lack of enforcement action could hurt the GPS Division's Federal funding levels.

Working with Industry

The Commission has approved new pipeline replacement rates through the 390P IREP cases for several distribution operators, increasing the rate of bare pipe replacement from up to 75 years to 20-25 years. This dramatic increase in construction activities will require additional inspectors to provide the necessary oversight.

GPS personnel continue to work with the oil and gas industry, providing guidance on proposed changes to pipeline safety regulations. Each year, GPS typically provides two educational seminars for industry representatives, but these were cancelled in 2020 due to the COVID-19 pandemic. GPS is exploring other means, such as virtual meetings, to provide education information. GPS personnel regularly participate in West Virginia Oil and Natural Gas Association (WVONGA) and IOGA meetings to discuss proposed changes to the Federal regulations. GPS personnel also work with industry organizations to create and update industry standards.

Siting of Pipelines

GPS is prohibited from participating in the siting and locating of any pipelines. Interstate pipelines are certificated by FERC and do not fall under State or Commission jurisdiction. GPS does not have jurisdiction in siting intrastate pipelines and has no oversight of non-regulated gathering pipelines.

Farm Taps

In 2017, PHMSA passed new regulations regarding farm taps, defining them as service pipelines. Taps on both regulated and unregulated pipelines will become regulated and will be inspected periodically. Farm tap operators will be required to report the number of taps annually. There was concern that the new regulations could lead to the abandonment of taps and the loss of gas service in underserved areas if operators choose not to adhere to the regulations.

In 2019, PHMSA issued a stay of enforcement regarding farm taps and allowed operators to inspect taps under either the new regulations or existing integrity management requirements. While PHMSA continues to examine the farm tap regulation, the GPS Division is working with industry on compliance issues.

Gathering Lines

While GPS oversees the safety of certain regulated gathering lines (as defined in 49CFR192), the majority of production and gathering lines are outside of any regulatory oversight.

National Association of Pipeline Safety Representatives

Gas Pipeline Safety Division Director Mary Friend was recently elected Vice-Chair of the National Association of Pipeline Safety Representatives (NAPSR). She will serve in that position until October 1, 2021, at which time she will become the National Chair. As a member of NAPSR, Friend serves on many internal committees, and was awarded the prestigious 2018 Chairman's award for Outstanding Service for her many contributions to improve pipeline safety.

Water and Wastewater

West Virginia American Water Company DSIC

West Virginia American Water Company (WVAW) filed a petition for approval of its Distribution System Improvement Charge (DSIC) for 2021 (Case No. 20-0465-W-DSIC). WVAW proposed an accelerated rate recovery of facilities for approximately \$50.6 million in capital investments to be made in 2021, resulting in a DSIC rate of 6.36%. WVAW later amended its application to include costs associated with the acquisition of the Page-Kincaid Public Service District water system.

The Commission initiated the WVAWC DSIC program and intended to address the obvious service issues and high unaccounted for water levels created by inadequate distribution system replacement rates. The Commission also intended the DSIC program to foster replacement of aging distribution system components by reducing the regulatory lag in obtaining rate recovery for non-income producing utility plant investments that occurs during the period between the end of the adjusted test year that is analyzed in a base rate case and the date that final rates determined in the next base rate case go into effect. The Commission initiated the DSIC proceedings because it understood that an innovative approach to rate recovery for those investments was needed in order to obtain the significant levels of capital required to fund distribution system infrastructure replacements.

Staff recommended a DSIC annual revenue requirement of \$6.627 million or 4.41% of current base revenues. The Staff adjustments resulted in an annual revenue requirement of \$3.28 million less than the amount proposed by the Company. CAD was granted intervenor status.

The Commission approved a DSIC of \$9.907 million, an increase of 4.06% above current rates, stating in their Final Order that the focus of the WVAW DSIC program should be to place a high priority on the replacement of aged, leaky mains, particularly the small diameter mains that have reached or, in some cases, exceeded their useful lives, as well as other necessary distribution system components. The Commission emphasized that eligible utility plant categories should not lessen the focus on the original intent of the DSIC program, which was to replace aging distribution system components. This case is now closed.

Page-Kincaid Public Service District

In 2019, Page-Kincaid Public Service District (PSD) applied to the Commission for a certificate to rehabilitate its water treatment plant in Fayette County at an estimated cost of \$3.35 million Case No. 19-0609-PWD-CN). WVAW intervened in that case, stating it was interested in either developing a wholesale purchased water agreement or acquiring the District's water system. After the Parties began discussing alternatives to the certificate project, the Commission granted the District's request to withdraw its certificate application. At the time, the Commission stressed the necessity of achieving a solution. When the District later took the position that it would only consider a proposal from WVAW to buy both the water and sewer systems, discussions broke down between the Parties.

Following the breakdown of negotiations, the Commission received petitions with more than 400 signatures and numerous formal complaints by customers, many of whom specifically requested the water system be taken over by a responsible utility. Commission Staff identified many problems with the District's system and strongly supported an acquisition by WVAW. Staff stated the District's source water presented a continuing challenge to

the quality of service, a problem WVAW would not have. Staff also identified multiple problems with the system that would not be solved by the District's proposed treatment plant project including the condition of the booster stations, missing pumps, the condition of the tanks, large quantities of sediment from poor quality water in the tanks, necessary leak detection work, repairs to the distribution lines and extensive flushing to remove the build-up of iron, manganese and sediment in the lines. The massive quantities of lost water throughout the system made it necessary for the District to pump and operate the water plant for 23 hours each day. Staff noted that WVAW had the expertise and resources to quickly improve water quality for a large percentage of the District's customers, likely within three months after an acquisition.

The Commission opened a General Investigation into the quality of water service provided by the District (Case No. 20-0397-PWD-GI). WVAW, CAD and the USDA were granted intervenor status. Following an evidentiary hearing, the Commission concluded the District had failed in its duty to its customers. The Commission gave the Parties 30 days to reach an agreement for WVAW to acquire the Paige-Kincaid water system.

In September 2020, the District's Board voted to proceed with an acquisition of its water system by WVAW. WVAW and the District filed a Joint Application seeking Commission approval of an Interim Water Sale Agreement and Asset Purchase Agreement for the Company's sale of water to the District, to serve portions of the District's distribution system, immediate Company investment in that system and the Company's subsequent acquisition of the District's water distribution facilities (Case No. 20-0718-W-PWD-PC). The Commission authorized WVAW to immediately begin construction of the interconnection and improvements to the water distribution system. The Commission also authorized WVAW to amend its DSIC filing to request reasonable, appropriate and timely rate recovery for the costs associated with the project.

On December 16, 2020, WVAW took the Page-Kincaid water treatment plant out of service. All Page-Kincaid PSD water customers are now receiving water from WVAW's New River water treatment plant. Case No. 19-0609-PWD-CN is closed but Case Nos. 20-0397-PWD-GI and 20-0718-W-PWD-PC are pending before the Commission.

Central Hampshire Public Service District

Central Hampshire PSD applied for increased rates and charges to offset a 19.21% increase in purchased water costs charged by the City of Romney (Case No. 18-1108-PWD-30B-SC). The District challenged the increased rate in a separate proceeding and noted that Romney was willing to defer the increase pending the outcome of the challenge.

Commission Staff recommended interim rates and the Commission directed the District to publish notice of those rates. The Commission approved the interim rate increase, subject to refund and directed the District to publish notice of the increased rates. The Commission

also directed the District to make an accounting of funds generated in the event Romney did not implement the higher resale rate.

Staff later revised their recommended rates, noted that the revised recommendation was below the level previously set and requested the District refund to customers the amount collected under the interim rates. The District and Romney agreed to a resale rate lower than the amount initially passed by Romney.

The Commission approved the revised interim rates, directed the District to file a statement informing the Commission whether it implemented the initial interim rates and to issue refunds if it had implemented the higher rate. When the Commission did not receive a reply from the District it issued two separate Orders demanding the District submit bills from Romney, explain what interim rates it had implemented and show that it complied with the Commission ordered publication requirements. The Commission then directed the District to refund any amount over-collected from the interim rates and to notify the Commission of completion of the required refunds.

Several months later, the District proposed issuing bill credits to customers for the over collected amounts. Staff objected to this proposal and recommended immediate refunds. The District withdrew its request and later reported it had mailed refunds to 1,692 customers totaling \$19,166, as directed by the Commission. This case is now closed.

Preston County Public Service District No.1

Preston County Public Service District No. 1 filed an application to increase its water rates and charges. The District requested an emergency interim rate increase of 34.2% and proposed a final rate increase of 45.7% (Case No. 19-0894-PWD-19A). The Commission is authorized to allow emergency interim rate changes to relieve a utility from financial distress, such as operating at a deficit. Staff, however, develops emergency interim rates carefully to prevent granting an interim rate in excess of the final rate, which would necessitate a refund. In this case, Staff recommended, and the Commission granted, an emergency interim rate increase of 26.11%.

An ALJ approved a final rate increase in two steps. Step 1 rates would generate an annual increase of \$470,345, or 54.38% over existing rates, and provide funds to meet the statutorily required cash working capital reserve. Step 1 rates were to take effect immediately and remain in effect until the District provided notice to the Commission that it has resumed using its original raw water source, following substantial completion of a local dam project. Upon that notice, the Step 2 rates were to take effect and generate a revenue increase of \$359,255, a 41.88% increase over prior rates, resulting in a \$111,090, or a 9.13% decrease from the Step 1 rates. The Commission approved Staff's recommended rates and charges. This case is now closed.

West Virginia Infrastructure and Jobs Development Council

The Public Service Commission is a voting member of the West Virginia Infrastructure and Jobs Development Council (WVIJDC). The WVIJDC serves as the funding clearinghouse for West Virginia's water, wastewater and economic development projects and streamlines support for needed infrastructure projects. Commission Staff serve as members of the Technical Review Committees (both water and sewer), the Funding Committee, the Consolidation Committee and the full Council.

Staff performs financial and engineering reviews for water and sewer filings brought before the WVIJDC. The engineering review takes into account the likely impact of any proposed project on the short and long term operations and maintenance costs of the utility. These estimates serve as a useful measure of the project's cost effectiveness and efficiency. Staff works closely with the applicants and their project teams to correct errors and fill in data gaps in the preliminary applications filed with the WVIJDC. In 2020, Staff reviewed 63 WVIJDC applications.

The Commission also assists the Council when questions arise about utility practice, ratemaking and regulation of public utilities. No other agency completes an independent review of the proposed utility rates, nor does any other agency have the extensive organizational knowledge of utilities and their service territories to identify opportunities for consolidation, merger or other opportunities to increase efficiencies and lower the cost of providing utility service.

Various State agencies, including the West Virginia Department of Health and Human Resources, Bureau for Public Health and the West Virginia Department of Environmental Protection (DEP), rely on the Commission review of WVIJDC filings and incorporate those reviews in their final recommendations.

Water and Sewer Certificate Cases

During 2020, the Commission approved 26 cases totaling more than \$107 million in investments to extend water or sewer service to almost 600 new customers. Municipalities, public service districts and water or sewer associations must obtain certificates of convenience and necessity from the Commission to expand, upgrade or replace water and sewer infrastructure within their service territories. The utility seeking a certificate of convenience and necessity submits an application, an engineering study describing the scope of the project, specifications for physical infrastructure to be constructed, estimated costs and the benefits to be provided by the project. The filing also describes the sources of funding for the project, such as loans and grants, and contains detailed financial statements regarding the impact of the project in terms of any additional customer revenue, changes in operating expenses and annual debt service requirements related to the project. The utility may request an increase in rates to support project costs.

The filing is reviewed to determine the adequacy of the supporting data. Additional information may be requested to assure that the Commission has all of the information required to determine the reasonableness of the request. Staff reviews the engineering specifications for design, cost and rate impact. Staff also reviews and analyzes the financial and operational data to determine appropriate rate levels if the utility's current rates will not generate adequate revenue to support the project costs. A public hearing is held and evidence is submitted by the utility, Staff and any intervenors about the need for the project, any modifications to the project and the proper rate levels required to support it. The Commission uses this evidence to determine if the project should be granted a certificate and the appropriate rates.

Following is a table summarizing those projects for which certificates of convenience and necessity were approved during 2020.

Utility Name	Estimated Cost	Pre-Project Customers	Customers Added	Date Approved
Branchland-Midkiff PSD	\$900,000	1,141	0	9/7/20
Camden-on-Gauley Water Works	\$1,388,000	156	84	5/27/20
City of Milton	\$7,900,000	1,930	20	3/18/20
City of New Cumberland	\$3,462,000	578	0	5/21/20
City of Pennsboro	\$3,800,000	618	0	7/20/20
City of Sistersville	\$4,560,000	952	200	4/2/20
Cowen PSD	\$3,351,000	1,448	0	9/23/20
Craigsville PSD	\$5,153,000	976	0	9/29/20
Grantsville Municipal Water Dept.	\$4,168,000	307	0	8/13/20
Kanawha Falls PSD	\$7,919,290	1,135	0	8/18/20
Monumental PSD	\$12,431,000	866	0	11/22/20
Nettie-Leivasy PSD	\$2,924,895	1,372	0	10/14/20
Oceana Municipal Water Works	\$3,696,684	1,172	0	1/26/20
Preston County PSD	\$5,761,000	242	122	8/21/20
Roncevert Municipal Water Dept.	\$4,200,000	960	0	7/8/20
Salt Rock Water PSD & WVAW	\$3,723,350	3,500	70	7/27/20
Sun Valley PSD	\$3,096,000	90	0	6/30/20
Town of Capon Bridge	\$2,682,000	218	0	5/19/20
Town of Elizabeth	\$3,600,000	852	100	1/6/20
Town of Ellenboro	\$2,465,000	265	0	8/11/20
Town of Mill Creek	\$4,251,000	396	0	2/26/20
Tyler County PSD	\$1,163,000	288	0	2/2/20
Tyler County PSD	\$2,152,800	970	0	4/10/20
West Dunbar PSD	\$9,180,000	675	0	7/17/20
Walton PSD	\$989,800	850	0	12/2/20
Washington Pike PSD	\$2,225,000	1,382	0	12/8/20

Public Water and Sewer 42A, 42R and 42T Rate Cases

The Commission has rate jurisdiction over public service districts with fewer than 4,500 customers or annual gross revenues less than \$3 million. Those water and sewer utilities under Commission jurisdiction with revenues in excess of \$3 million and fewer than 4,500 customers are required to file full financial support for their requested rates. The proposed rates are published and Staff undertakes a full review of the utility's books and records.

Following its review, Staff recommends new rates. If the utility does not object to Staff's proposed rates and if there is not significant public protest, Staff's recommended rates may be approved without a public hearing. If the utility objects to Staff's recommendation or if there is significant public protest, a hearing will be held. Based on testimony and the evidence presented at the hearing, the Commission determines a reasonable level of rates.

In 2020, the Commission completed 12 public water and sewer rate cases. Others are in progress. The results of those completed cases are summarized below.

Utility	Amount Requested	Percent Requested	Amount Granted	Increase/Decrease	Customers	Date Approved
Bluewell PSD, Step 1	\$233,895	14.25%	\$150,721	9.46%	2,968	9/9/20
Bluewell PSD, Step 2			\$76,318	4%		
Center PSD, Step 1	\$78,646	16.10%	\$53,923	9.58%	741	8/30/20
Center PSD, Step 2	\$58,337	10.30%	\$67,350	12.68%		
Central Hampshire PSD	\$117,227	14.60%	\$117,227	14.60%	776	4/27/20
Cowen PSD	\$6,493	0.91%	\$16,757	2.35%	1,394	1/8/20
Craigsville PSD, Step 1	\$211,592	41.97%	\$151,083	28.34%	984	3/4/20
Craigsville PSD, Step 2	\$154,415	-11.34%	\$129,470	-3.10%		
Flatwoods-Canoe Run PSD (Sewer)	\$176,453	14.60%	\$145,030	12.00%	1,323	9/3/20
Flatwoods-Canoe Run PSD (Water)	\$191,374	11.05%	\$143,783	8.24%	1,927	10/11/20
Midland PSD	\$39,409	7.13%	\$40,032	7.24%	898	9/28/20
Pea Ridge PSD	\$314,336	11.01%	\$314,326	11.02%	4,800	4/27/20
Preston County PSD No. 4	\$278,074	18.70%	\$212,943	13.78%	1,716	3/17/20
Valley Falls PSD, Step 1	\$257,057	31.79%	\$257,056	31.79%	1,633	4/15/20
Valley Falls PSD, Step 2			\$200,838	-6.95%		
Wilderness PSD	\$110,739	10.21%	\$134,996	12.44%	2,504	11/9/20

Rule 19A Rate Cases

The Commission uses an accelerated and simplified procedure for smaller utilities to file for increased rates without requiring these utilities to develop their own financial exhibits and rate requests. In those instances, Staff performs all of the financial analyses required to establish appropriate rates. In most cases, the utility does not request specific rates or

a given level of increase and the Staff recommends new rates for the utility based on its review. This process, a 19A rate case, saves the utility the time and expense of preparing and filing a full rate case.

Previously, utilities with gross annual revenues less than \$1 million were able to file a 19A rate case. In 2019, the Commission changed the criteria, stating a 19A proceeding would now be available to utilities with fewer than 4,500 customers and annual gross revenue less than \$3 million, making the optional procedure available to more utilities.

In 2020, 45 19A rate filings were completed. Those cases are summarized below.

Utility Name	Amount Granted	Increase/Decrease	Customers	Date Approved
Armstrong PSD (Water)	\$105,316	26.15%	766	8/4/20
Bradley PSD	\$73,963	6.27%	1,597	8/2/20
Buffalo Creek PSD, Step 1	\$0	0.00%	1,503	2/3/20
Buffalo Creek PSD, Step 2	-\$47,031	-6.10%		
Buffalo Creek PSD, Step 1	\$77,702	13.08%	1,078	3/9/20
Buffalo Creek PSD, Step 2	\$13,031	2.19%		
Buffalo Creek PSD, Step 1	\$87,471	10.39%	1,869	9/28/20
Buffalo Creek PSD, Step 2	\$124,213	14.76%		
Canaan Valley PSD, Receiver for Timberline Four Seasons (Water)	\$53,540	23.94%	425	5/24/20
Canaan Valley PSD, Receiver for Timberline Four Seasons (Sewer)	\$89,978	24.72%	743	
Central Boaz PSD, Step 1	\$16,970	6.57%	652	8/6/20
Central Boaz PSD, Step 2	\$16,960	7.02%		
Clover PSD	\$32,177	15.45%	387	8/31/20
Cowen PSD	\$75,904	21.73%	564	9/7/20
Coon's Run PSD, Step 1	\$22,950	10.52%	430	2/25/20
Coon's Run PSD, Step 2	\$7,566	3.47%		
Culloden PSD	\$80,357	9.71%	1,208	6/1/20
Deckers Creek PSD	\$99,765	13.69%	1,974	5/18/20
East View PSD	\$9,915	13.02%	235	5/5/20
Enlarged Hepzibah PSD, Step 1	\$60,582	11.90%	805	1/8/20
Enlarged Hepzibah PSD, Step 2	\$5,413	1.06%		
Gap Mills PSD	\$18,985	25.62%	185	6/2/20
Gilmer County PSD	\$126,560	8.97%	760	8/25/20
Greater Marion PSD	\$54,737	17.93%	423	10/12/20
Greater Paw Paw Sanitary District	\$19,333	25.08%	1,331	12/3/20
Hamlin PSD	\$0	0.00%	687	7/26/20

Utility Name	Amount Granted	Increase/ Decrease	Customers	Date Approved
Hammond PSD	\$59,169	10.93%	919	6/4/20
HPSD	\$64,584	37.41%	254	4/20/20
Kanawha PSD, Step 1	\$561,580	30.55%	2,444	6/16/20
Kanawha PSD, Step 2	-\$109,926	-5.98%		
Lincoln PSD	\$83,035	8.90%	2,568	3/3/20
Linmont Sanitation System	\$14,702	58.34%	69	4/9/20
Mannington PSD	\$90,832	15.64%	544	11/2/20
Marshall Co. PSD No. 1	\$44,505	8.22%	1,446	12/21/20
Marshall Co. PSD No. 2, Step 1	\$36,046	9.31%	563	2/23/20
Marshall Co. PSD No. 2, Step 2	\$29,123	7.52%		
McDowell County PSD, Step 1	\$288,662	15.08%	3,210	4/9/20
McDowell County PSD, Step 2	-\$200,832	-89.65%		
Mountain Top PSD (Sewer)	\$8,832	6.22%	300	5/14/20
Mountain Top PSD (Water)	\$77,046	21.44%	887	8/9/20
Mountain View Water Assoc.	\$62,259	13.72%	892	9/21/20
Mt. Zion PSD, Step 1	\$66,536	17.00%	495	2/3/20
Mt. Zion PSD, Step 2	\$21,589	5.52%		
Mt. Zion PSD, Step 3	\$38,858	9.93%		
Webster Springs PSD	\$0	0.00%	641	3/31/20
Oakvale Road PSD	\$164,696	16.14%	1,830	9/10/20
Ogden Sewer Co.	\$7,668	30.71%	80	3/25/20
Paw Paw Route 19 PSD	\$44,479	12.44%	539	7/5/20
Preston County PSD No. 1, Step 1	\$470,345	54.83%	1,472	5/5/20
Preston County PSD No. 1, Step 2	-\$111,090	-9.13%		
Prichard PSD	\$42,535	50.66%	195	7/13/20
Salt Rock Sewer PSD	\$256,731	20.76%	1,752	6/23/20
Spring Valley PSD, Step 1	\$271,942	53.74%	516	1/12/20
Spring Valley PSD, Step 2	\$159,482	31.52%		
Union Williams PSD	\$18,544	1.28%	1,833	9/30/20
Washington Pike PSD, Step 1	\$87,340	13.84%	1,383	5/20/20
Washington Pike PSD, Step 2	\$85,715	-1.86%		
West Logan Water Co.	\$22,576	12.82%	415	3/11/20
White Oak PSD, Step 1	\$56,645	14.07%	959	2/27/20
White Oak PSD, Step 2	\$47,203	11.73%		
Williamsburg Sewer System	\$7,250	10.11%	207	10/1/20

Rule 30B Pass-Through Cases

The Commission allows smaller water and sewer utilities that purchase finished water for resale or that have the sewage they collect treated at a plant operated by another utility to file to recover rate increases on an expedited basis for resale rates charged to them. In these cases, the Commission allows the purchasing utility to increase rates to its customers enough to make them whole for the increased cost of purchased water or sewage treatment services. The utility is required to publish the new rates and to provide an opportunity for public protest.

Because the amount of the pass-through rate is largely a mathematical calculation, there is usually little dispute between the utility and Staff as to the rates. If no significant public protest is received, the rates are usually quickly approved without the need for a public hearing. If high levels of unaccounted for or lost water are discovered during Staff's review, the Commission may require the utility to determine the causes of the high water loss, develop a remediation plan and report the results of steps taken prior to approving the interim rate increases as final rates. Nine 30B pass-through rate filings were completed in 2020.

Telecommunications

Frontier and Citizens Telecommunications Copper Network and Quality of Service

In 2018, the Communications Workers of America filed a Petition with the Commission requesting a General Investigation into the status of Frontier West Virginia Inc. and Citizens Telecommunications Company of West Virginia dba Frontier Communications of West Virginia's copper network in West Virginia and the service quality issues related to the network (Case No. 18-0291-T-P).

After receiving numerous and increasing complaints regarding Frontier's quality of service, the Commission ordered a focused management audit of Frontier to determine if Frontier was operating efficiently, utilizing sound management practices and to identify those areas where Frontier was not operating efficiently. The Commission determined it did not have adequate staff to conduct a management audit in a timely manner and ordered that the audit be conducted by a qualified outside auditing firm and paid for by Frontier. The audit was to focus on the current status of the copper network, adequacy of staffing levels dedicated to the copper network, adequacy of capital investment in the copper network since 2010, adequacy of policies and procedures impacting the quality of service, adequacy of metrics currently in place to measure quality of service, impact of the declining customer base on internal cash flow from operations relative to historic and current copper infrastructure maintenance and capital investment and the impact of the current bargaining agreement

and ongoing relations between management and labor on customer service quality and response timing. The audit was to make appropriate recommendations for addressing those areas that need to be improved.

The Commission directed Frontier to issue a request for proposals to identify qualified firms interested in conducting the audit. Frontier's original choice of auditing firms was rejected by the Commission because it was determined that Frontier had placed too high a value on the cost of the audit and too little weight on the bidding firms' resources, experience, audit planning, audit methodology, audit standards and report writing ability. The Commission reviewed the bid package information submitted by the audit candidates and determined that Schumaker and Associates was a well qualified candidate and presented the most comprehensive audit plan and resources for conducting the focused management audit.

Shumaker conducted the audit and filed the *Final Focused Service Quality Management Audit Report* with the Commission as a confidential filing. Soon thereafter, Frontier filed a Motion for Protective Order and a redacted public version of the report. The report included numerous recommendations for areas that need to be improved, including quality of service. Frontier committed to implement certain of the recommendations contained in the audit. The Parties continue to negotiate about the implementation of audit recommendations.

The Communication Workers of America, AFL-CIO (CWA) and CAD have been granted intervenor status. The West Virginia Broadband Enhancement Council filed a Petition to Intervene, which the Commission denied. This case is pending before the Commission.

Frontier and Citizens Telecommunications Joint Application for Expedited Approval of Certain Chapter 11 Related Reorganization Changes

Frontier West Virginia, Inc., and Citizens Telecommunications Company of West Virginia dba Frontier Communications of West Virginia (Frontier) filed a petition seeking Commission approval of a transaction in which Frontier's parent corporation would convey all its assets, (including its interest in Frontier) to a newly formed company, Reorganized Frontier, as part of its Chapter 11 bankruptcy proceeding (Case No. 20-0400-T-PC). Frontier also filed a Joint Plan of Reorganization in which the holders of Senior Notes will receive their pro rata share of 100% of the common stock of Reorganized Frontier, thereby eliminating over \$10 billion in debt and interest expense payments of \$1 billion annually. All other holders of secured or unsecured claims would either be paid in full, reinstated or otherwise unimpaired by the restructuring, except existing shareholders who would receive nothing for their shares in the existing parent company.

CWA and CAD have been granted intervenor status. The West Virginia Broadband Enhancement Council filed a Petition to Intervene, which the Commission denied.

Staff filed a recommendation that the Commission refrain from approving the transaction until Frontier provides assurances that (i) West Virginia would be included as one of the states where Frontier will deploy fiber upgrades to homes, and (ii) sufficient funds are available to immediately implement the recommendations of the Focused Management Audit as may be imposed by the Commission in pending Case No. 18-0291-T-P.

During the evidentiary hearing Frontier representatives disclosed that West Virginia had been designated an “InvestCo” state under its “Virtual Separation” plan, meaning that Frontier intends to invest in fiber in West Virginia beginning in 2021. The Parties submitted a Joint Stipulation to the Commission. This case is pending before the Commission.

Hampshire County 911 v. Frontier and Citizens Telecommunications

Hampshire County 911 filed a complaint against Citizens Telecommunications Company of West Virginia dba Frontier Communications of West Virginia, alleging that Frontier continues to have outages affecting the 911 system (Case No. 19-0506-T-C). During one particular outage, service was not reinstated for over 12 hours. The cause of that outage was a defective card that caused the Reconfigurable Optical Add-Drop Multiplier (ROADM) to go down in the Romney area. Frontier had to wait for the delivery of a new card before repairs could be made. Hampshire County 911 contended Frontier should ensure that parts are locally stocked so that repairs could be made quickly.

In its response, Frontier stated that it was investigating building a ROADM ring in that area to allow for full redundancy by being capable of switching traffic in an alternate direction. The estimated cost was \$2.9 million and would require fiber, ROADM and Synchronous Optical NETWORK placement. Hampshire County 911 filed an update stating that Hampshire County had experienced another 911 outage for approximately 2.5 hours. The outage was caused by a planned fiber splice by Frontier for maintenance purposes.

Frontier filed a Joint Stipulation on behalf of both Parties that stated the Parties agreed that Frontier would build or lease facilities in phases to provide a secondary route for Hampshire 911. This will improve the reliability of interexchange communications in Hampshire County. In exchange, Hampshire 911 agreed to dismiss the complaint.

The Commission approved the Joint Stipulation and required Frontier to begin filing monthly status reports in this matter. This case is now closed.

General Investigation Regarding the Use of Federal Universal Service Funding by Eligible Telecommunications Carriers

The Federal Communications Commission (FCC) requires each state to certify that all high cost funds flowing to rural and non-rural carriers in that state are used in accordance with the Telecommunication Act of 1934. The Commission initiated a General Investigation regarding the use of Federal Universal Service Funding by Eligible Telecommunications Carriers in West Virginia (Case No. 20-0317-T-GI).

A Recommended Decision was issued directing a certification be issued to the FCC and the Universal Service Administration Company stating that the carriers appropriately utilized Federal high-cost and other universal service support. This case is now closed.

Enhanced 911 Wireless Tower Access Assistance Fund

Revenue for the Wireless Tower Access Assistance Fund (WTAAF) is generated from a fee collected each month from cell phone subscribers. The Commission administers this fund, but it passes all monies to recipients, as required by law. The Commission does not charge for its services in collecting the fees or administering the grants.

Initially \$83,333.33 collected from that fee was deposited into the WTAAF each month. In 2020, the Legislature replaced that set amount with a wireless tower fee of \$0.08 per in-state two-way wireless service subscriber per month. The fund began 2020 with a balance of \$390,038.

In 2020, Wetzel County (TAF Wetzel 19A) was awarded a grant of \$556,900 and Mercer County (TAF Mercer 20A) was awarded a grant of \$419,524. As of December 31, 2020, the WTAAF had a balance of uncommitted funds of \$413,756.

Transportation Safety Enforcement

Special Initiatives

The Commission's Transportation Division works with the Commercial Vehicle Safety Alliance (CVSA) and the Federal Motor Carrier Safety Administration (FMCSA) to increase safety enforcement for commercial motor vehicles on interstate highways and heavily traveled roadways in order to reduce commercial vehicle and passenger carrier incidents. In 2020, Transportation Enforcement Officers worked with FMCSA to increase the number of passenger carrier inspections and on a variety of special initiatives, including

the annual 72 consecutive hour International Roadcheck, Brake Safety Week, Hazardous Materials Road Blitz and Operation Safe Driver.

Transportation Enforcement Officers teamed up with the Governor's Highway Safety Program (GHSP) to increase seatbelt use in passenger and commercial motor vehicles through a "Click It or Ticket" campaign. The initial blitz occurred in October 2020, and will be followed by three additional blitzes in 2021. In 2021, Officers will also participate in the GHSP Speed Enforcement campaign.

In an effort to combat human trafficking, Officers received training from Truckers Against Trafficking in the third quarter of 2020. The issues covered in training included The Rules of the Game, Do's and Don'ts for Roadside Officers when Interacting with a Human Trafficking Victim, Types of Traffickers and Sex Trafficking.

PSC Transportation Officers Earn \$40 Million for State Highway Fund

In 2020, the Commission's Transportation Enforcement Officers earned \$40 million for the State Highway Fund by once again meeting all Federal requirements for enforcing laws relating to maximum vehicle size and weights on the Interstate Highway System and state highways. Meeting these requirements is necessary in order for West Virginia to receive its full allotment of the Federal-aid Highway funds for the National Highway System apportioned to the State. The PSC has met these requirements every year since taking over weight enforcement efforts from the West Virginia Division of Highways (DOH) in 2003. Had the PSC not met the Federal requirements, the State would have suffered a 10% reduction in funds, or a loss of around \$40 million. The funds are received by the DOH and used for routine maintenance or other improvements.

Federal Highway Administration policy mandates each state enforce vehicle size and weight laws to assure that violations are discouraged and those vehicles traveling the highway system do not exceed the limits specified by law. These size and weight limits are based upon design specifications and safety considerations. Enforcement efforts are developed and maintained both to prevent premature deterioration of the highway pavement and structures and to provide a safe driving environment.

Working with Law Enforcement

Transportation Enforcement Officers participate in many joint activities with the West Virginia State Police (WVSP). Historically, we have assisted with firearms training during Basic and Cadet Classes at the WVSP Academy, assisted with annual firearms training for current troopers, conducted DUI checkpoints and other efforts as requested by the WVSP. Transportation Enforcement Officers also work with local law enforcement on

DUI, seatbelt and speed control activities. It is important to note all these types of joint activities have been extremely limited during 2020 as a result of the COVID-19 pandemic.

Enforcement Officers worked with the WVSP on the West Virginia Turnpike and Route 35 to increase safety enforcement during the busy road construction season.

Upgrading Facilities

The Commission continues efforts to upgrade its I-77 southbound weigh station in Mineral Wells to a state-of-the-art facility featuring the IIS Smart Roadside System. This system will include an automated license plate reader, an automated USDOT number reader, an automated vehicle camera and an automated thermal inspection system. In addition, plans are underway to install a virtual roadside inspection facility on Route 50 in Wood County. Equipment for these systems will be purchased with the assistance of a USDOT Commercial Vehicle Inspection System Network grant.

The Commission and DOH have recently replaced the scales at both the eastbound and westbound weigh stations on I-64 in Winfield.

Coal Resource Transportation Division

The Coal Resource Transportation System (CRTS) has significantly increased public safety while allowing coal producers to efficiently transport coal in 19 West Virginia counties and into surrounding states. Coal facilities and transporters now work together to haul increased weights on over 2,100 miles of West Virginia's roads designated by DOH as CRTS routes. Coal haulers may purchase a permit that will allow for a gross vehicle weight of up to 120,000 pounds, depending on the truck configuration and the specific routes on which the truck will be operating. Coal operations and transporters operating on designated CRTS roads must adhere to additional reporting and permitting statutes and regulations and are subject to administrative sanctions by the Commission.

Notices of Violation (NOV) are initiated through audits conducted by CRTS inspectors and supervisors or by uniform traffic citations issued by Transportation Enforcement Officers. In 2020, there were 238 NOV's issued, one Petition for Waiver was processed and the Commission collected \$194,916 for CRTS violations.

In 2020, the CRTS Permitting Unit registered 176 transport companies in five states and issued 1,066 permits. Over the past 12 months, the CRTS Reporting Unit had 126 mines, plants, load outs and other coal facilities registered to operate in West Virginia and report coal shipments to the Commission. Daily electronic files were submitted to the Commission containing unique tracking information for approximately 1.2 million transactions,

representing over 611,550 loads, or approximately 22 million tons of coal being transported over CRTS roads during the last 12 months. Each electronic transaction contains the origin, destination, date, time, weight, permit ID and a unique transaction number for that specific shipment of coal. Records are forwarded to the CRTS Auditing Program and are reviewed by Staff to detect non-compliance. Staff conducts onsite inspections and audits and initiates administrative violations to companies. The CRTS program generated \$1.6 million in 2020 dedicated for improvements and repairs to CRTS roads and bridges.

Complaints about coal trucks operating on the CRTS highways can be made through the Commission's 1-866-SEE-TRUX hotline. In 2020, CRTS officers received and processed 53 complaints from the CRTS hotline, ranging from speeding and overweight trucks to impaired drivers.

Electronic Logging Devices

The mandatory deadline for most motor carriers to utilize electronic logging devices was December 17, 2019. Officers have received ongoing training in 2020 on inspecting these devices for rule compliance with device usage and hours of service limits. Officers have also received extensive training on the multiple changes made to the hours of service rule made by Congress and FMCSA.

Drug and Alcohol Clearinghouse

The Drug and Alcohol Clearinghouse is a secure online database that gives employers, FMCSA, State Driver Licensing Agencies (SDLA), and State law enforcement personnel real-time information about commercial driver's license (CDL) and commercial learner's permit holders' drug and alcohol program violations. The Clearinghouse contains records of violations of drug and alcohol prohibitions, including positive drug or alcohol test results and test refusals. When a driver completes the return-to-duty process and follow-up testing plan, this information is also recorded in the Clearinghouse. SDLAs will be able to query the Clearinghouse prior to completing licensing transactions, such as the issuance, renewal, transfer and upgrade of a CDL.

All Commission Transportation Enforcement Officers have received training on enforcement of the new Drug and Alcohol Clearinghouse rules and procedures to take when a driver is found to be in violation.

Motor Carrier Section

The Transportation Division's Motor Carrier Section conducts registration of intrastate and interstate motor carriers and collects intrastate and interstate assessments, registration fees, filing fees for intrastate authority, insurance fees and HazMat (hazardous materials) permits. Most of the revenue collected is from Unified Carrier Registration fees. The revenue collected goes to fund motor carrier safety enforcement programs.

Railroad Safety

In 2020 the Commission added an online portal to its website through which individuals can report trains that are illegally blocking one of the 8,000 public highway rail crossings in West Virginia. In order to report a blocked crossing, citizens must report the date, time, how long the crossing was blocked, the location and the USDOT number of the blocked crossing.

The Commission participated in Rail Safety Week 2020 to raise public awareness about the potential hazards of driving near railroad rights-of-way and highway-rail grade crossings.

During 2020, Railroad Safety Section Inspectors conducted 1,326 inspections, inspected over 1,100 miles of track (mostly on foot), citing 591 defective track conditions. They inspected 357 highway-rail grade crossings and 23,450 rail cars and locomotives, citing 1,848 defects.

During 2020, the Railroad Safety Section acquired the first dual discipline state inspector in the nation with Federal certifications in both Operating Practices and Track. We currently have one inspector in training and expect to have that inspector federally certified in early 2021.

The Commission maintains a comprehensive Hazardous Materials Inspection Program and our Operating Practices Inspectors constantly monitor railroad operations. An intensive inspection program, coupled with the fact that most of the Commission's Railroad Safety Inspectors are also Operation Lifesaver volunteers, has made West Virginia's railroads among the safest in the nation.

Motor Carriers

General Investigation Relating to Statewide Wrecker Rates for Ancillary Equipment

The Commission initiated a General Investigation relating to statewide third party wrecker rates for ancillary equipment in response to the request of the West Virginia Towing and

Recovery Association in Case No. 19-1050-MC-P (Case No. 20-0796-MC-GI). In their request, the Association sought rate increases for additional labor and storage and a new rate of \$750 for mobilization of special equipment to and from an accident. The Commission granted the request for a GI as it had been more than four years since the Commission last initiated a GI into maximum statewide wrecker rates for third party tows. The West Virginia Towing and Recovery Association, the Owner-Operator Independent Drivers Association and Enterprise Rent a Car have been granted intervenor status. This case is pending before the Commission.

Allied Waste Services of North America, LLC, dba Republic Services of West Virginia Rate Cases

Allied Waste Services of North America, LLC, dba Republic Services of West Virginia filed for rate increases under a new statutory provision passed in the 2020 Legislative Session that shortens the time period for base rate case approval to 120 days from the date the carrier gives notice to its customers of the proposed rate increase (13 separate cases: Case Nos. 20-0531-MC-42SW through 20-0535-MC-42SW, and 20-0538-MC-42SW through 20-0545-MC-42SW). Republic submitted evidence to support the proposed rate increases.

Rates were approved in Case Nos. 20-0538-MC-42SW through 20-0545-MC-42SW. These cases are now closed.

Parties submitted a Joint Stipulation for the second set of cases (Case Nos. 20-0531-MC-42SW through 20-0535-MC-42SW). The Commission approved the Joint Stipulation as submitted. These cases are now closed.

Consumer Price Index Rate Increases

The West Virginia Legislature passed legislation in the 2020 General Session to allow solid waste common carriers to automatically increase rates on an annual basis beginning January 1, 2021, by giving proper notice to the Commission and its customers at least 30 days in advance of January 1 of each year, with the rates to be effective on January 1. The rate increase is to be based on the previous year's increase in the *Garbage and Trash Collection Consumer Price Index* (CPI) published by the U.S. Bureau of Labor and Statistics. The Commission determined that the rate increase for 2021 would be 3.58%. A solid waste common carrier may avail itself of the *CPI Index* for four years, but must file a base rate case during the fifth year before it may again utilize the CPI Index for a rate increase.

The Commission received 93 CPI cases in 2020, 87 of which are now closed.

Fuel Surcharges

The Commission continues to respond to the volatility of fuel costs for motor carriers by reviewing and adjusting fuel surcharges for regulated motor carriers. This series of surcharges was initiated in MC GO 56.4 (Reopened) in March 2004 following a dramatic increase in fuel prices from previous levels. The most recent surcharges are based on forecasted fuel prices for the period of January 1, 2021 through June 30, 2021.

The average price for unleaded regular gasoline is forecasted to be \$2.27 per gallon and the price of diesel is forecasted to be \$2.39 per gallon. This forecast reflects increases of \$0.27 per gallon for regular grade gasoline and \$0.05 per gallon for diesel fuel over the previously forecasted average prices for July 1, 2020 through December 31, 2020. The Commission, therefore, increased authorized fuel surcharges to 3.93% for solid waste carriers, 9.19% for taxi operators and 4.29% for wrecker operators.

Fuel prices are reviewed every six months to determine if there is a need for relief for eligible motor carriers. The surcharges are not automatic. Eligible motor carriers may not charge the old surcharge after it has expired and may not implement a new surcharge unless they have filed a Fuel Surcharge Supplement to their tariffs with the Commission Tariff Office.

Staff will continue to monitor fuel prices, and the Commission will continue to make adjustments in its semi-annual General Orders. If there is a 20% or greater increase or decrease in the price of regular grade gasoline, diesel fuel or both between its semi-annual Orders, Staff will file a further memorandum requesting a reopening of the case and will recommend adjustments to the fuel surcharges based on that increase or decrease in price.

Motor Carrier Rate Cases

The Commission completed 13 applications to increase motor carrier rates in 2020.

Utility Name and Certificate Numbers	Amount Granted	Percent Increase	Customers	Date Approved
Allegheny Disposal, Certificate No. F-6609	\$128,438	18.78%	1,350	11/16/20
Allied Wastes Services of North America, dba Republic Services of West Virginia, Certificate Nos. F-7355, F-7336, F-7337, F-7418 and F-7550	\$1,378,385	10.91%	23,000	11/10/20
Allied Wastes Services of North America, dba Republic Services of West Virginia, Certificate Nos. F-4865, F-4879, F-5619, F-5620, F-7439, F-7498, F-7584 and F7585	\$1,294,616	9.29%	14,000	10/28/20
Apple Valley Waste, Certificate Nos. F-7496 and F-7519	\$2,500,000	18.84%	26,000	12/15/20
Barrackville Garbage Service, Certificate Nos. F-6013 and F-4985	\$61,077	11.61%	2,000	10/20/20

Utility Name and Certificate Numbers	Amount Granted	Percent Increase	Customers	Date Approved
Beckley Garbage Disposal, Certificate Nos. F-4620 and F-6296	\$534,184	16.85%	9,000	8/31/20
Enterprise Sanitation, Certificate Nos. F-7483, F-7489 and Permit No. H-10839	\$327,472	14.44%	7,000	11/4/20
Harold's Refuse Removal, Certificate No. F-5449	\$173,832	10.35%	3,655	12/28/20
North Fork Disposal Service, Certificate No. F-6178	\$93,660	23.82%	820	4/20/20
Peer's Sanitation, Certificate No. F-6177 and Permit No. H-10127	\$36,807	13.85%	761	5/11/20
Quality Sanitation Service, Certificate No. F-6059	\$173,832	10.35%	3,655	12/28/20
Taylor's Trash Removal, Certificate Nos. F-4981 and F-5220	\$51,081	21.67%	428	5/26/20
Wood County Waste, Certificate Nos. F-5011 and F-5468	\$173,832	10.35%	3,655	12/28/20

Solid Waste Facilities/Landfills

Tucker County Solid Waste Authority

As a result of Commission action in Case No. 05-1379-SWF-42A, the Tucker County Solid Waste Authority (TCSWA) was required to establish and fund two separate limited access escrow accounts, one for future closure and post closure costs and one for the funding of the construction of future cells and/or the purchase or replacement of equipment. TCSWA was ordered to seek Commission approval before releasing funds from those escrow accounts.

In November 2019, Staff filed a petition to institute a General Investigation into withdrawals totaling \$923,345 made by the TCSWA from the construction escrow account without Commission permission (Case No. 19-1136-SWF-GI).

Staff's investigation showed that the \$923,345 was legitimately spent on improvements and repairs to the landfill and ancillary facilities. Staff found no evidence of misappropriation. The Commission terminated the escrow agreement. This case is now closed.

Rulemaking Proceedings

Rules Governing Sewer Utilities

Rules Governing Water Utilities

Senate Bill 739 (SB 739) became effective in 2020, authorizing the Commission to protect the customers of distressed and failing water and wastewater utilities by ordering various corrective measures up to and including acquisition of a failing utility by a capable water or wastewater utility.

The Commission proposed additions to the Sewer Rules through General Order 186.35 (GO 186.35) and to the Water Rules (GO 188.40) to address the statutory changes created by SB 739. These additions set forth the procedural steps necessary to identify a distressed or failing water or wastewater utility and provide assistance to that facility, including the management or takeover of that facility by another utility, if necessary. Comments on the proposed Rules were received by the Commission.

In addition to the Rule amendments required by SB 739, the Commission proposed other amendments to the Sewer Rules and Water Rules, which include (i) renumbering the Rules to conform to current Secretary of State requirements; (ii) amending the water leak language in Water Rule 6.4.3 and Sewer Rule 6.4.3; (iii) modifying Water Rule 6.2.1. and Sewer Rule 6.2.1 to indicate that interest on deposits is now handled by General Order and not rulemaking; and (iv) modifying Water Rule 6.8. and Sewer Rule 6.8 to make the Discontinuance of Service Rules similar to the Rules for the Regulation of Electric Utilities, 150 C.S.R. 3, and Rules for the Regulation of Gas Utilities, 150 C.S.R. 4. The proposed Rules also modify the notice of filing language.

Initial comments were filed by interested Parties. These cases are pending before the Commission.

Rules Governing Emergency Telephone Service

SB 579, the Wireless Enhanced 911 (E-911) Fee, became effective in June 2020. The new law made significant changes to the collection, remission and disbursement of the fees collected from in-state, two-way service subscribers (customers). The purpose of SB 579 was to eliminate the Federal Communication Commission's (FCC) post-audit concern that the state of West Virginia was diverting E-911 fees to non-E-911 uses and, as a result, disqualify the state for additional E-911 grant funding from FCC.

The Commission issued GO 187.55 to provide commercial mobile radio service (CMRS) providers guidance regarding the requirements of the new law. Beginning July 1, 2020,

CMRS providers were required to separately bill for and collect from customers the wireless enhanced 911 fee, wireless tower fee, West Virginia State Police public safety fee and Division of Homeland Security and Emergency Management public safety fee. CMRS providers were required to start remitting funds to the Commission for each fee separately. The Commission provided instruction regarding the distribution of fee revenues to recipients.

The Commission intends to propose corrective legislation in the 2021 Legislative Session to correct the \$0.02 rounding error that unintentionally reduced the total amount of fees charged and to address the impact of the CMRS providers' 3% billing fee on all fee recipients. Thereafter, the Commission intends to initiate a rulemaking proceeding to revise the Rules Governing Emergency Telephone Service.

Rules Governing Motor Carriers, Private Commercial Carriers, and the Filing of Evidence of Insurance and Financial Responsibility of Motor Carriers

Rules for the Construction and Filing of Tariffs

SB 686 became effective in 2020, authorizing the Commission to appoint an emergency substitute carrier when the certificate or permit of common and contract carriers by motor vehicle are either suspended or revoked by the Commission. SB 686 also allowed an entity that has had its certificate or permit suspended to petition the Commission to have its certificate or permit reinstated.

Soon after SB 686 became effective, the Commission issued MC GO 64.5, amending the Rules Governing Motor Carriers, Private Commercial Carriers, and the Filing of Evidence of Insurance and Financial Responsibility of Motor Carriers to accommodate the changes made by SB 686.

HB 4587 also became effective in 2020, allowing (i) for the transfer of certificates to another certificated holder for the same commodity with approval by the Commission within 90 days following the submission of a completed application; (ii) a motor carrier of solid waste to suspend service for up to five days at its discretion for certain reasons, including dangerous road conditions, inclement weather, flooding, road closures, etc.; and (iii) for two new methods for motor carriers of solid waste to change their rates. Passage of HB 4587 required the Commission to amend portions of both Rules Governing Motor Carriers, Private Commercial Carriers, and the Filing of Evidence of Insurance and Financial Responsibility of Motor Carriers and the Rules for the Construction and Filing of Tariffs (GO 183.12). Initial and reply comments have been filed. This case is pending before the Commission.

Rules Governing Siting Certificates for Solar Exempt Wholesale Generators

During the 2020 Legislative Session, the West Virginia Legislature passed Enrolled Substitute for SB 583, which provides for Commission review of applications for siting certificates by Exempt Wholesale Generators generating power by solar methods. The Commission issued GO 263 proposing Solar Siting Rules. Prior to the passage of SB 583 all EWG applications were governed by W.Va. Code §24-2-11c and the Commission Rules Governing Siting Certificates for Exempt Wholesale Generators, 150 C.S.R 30. The Commission adopted the Solar Siting Rules to give direction to those EWGs filing for a siting certificate under W.Va. Code §24-2-1o. This case is now closed.

Rules Governing Transportation of Natural Gas

During the 2020 Legislative Session, the West Virginia Legislature passed SB 802, which provides an alternate method of notice and certification to bypass utility facilities for a person, entity or facility that has not previously been a natural gas customer that will use large volumes of natural gas produced in West Virginia. The Commission issued GO 228.3 and opened a rulemaking proceeding with proposed revisions to Rules Governing Transportation of Natural Gas.

Initial comments were filed October 27, 2020, and reply comments were filed November 16, 2020. This case is pending before the Commission.

The Courts**Supreme Court of Appeals of West Virginia***Metro Tristate v. Public Service Commission and Community Pastor Care*

Metro Tristate Inc. filed a formal complaint and Motion for Interim Relief against Community Pastor Care (CPC) alleging that CPC was unlawfully providing transportation of passengers for hire by transporting veterans in Cabell and Wayne Counties to the Huntington VA Medical Center (Case No. 18-1315-MC-C). Metro requested an interim order requiring CPC to cease and desist from providing these transportation services until it obtained authority from the Commission.

CPC filed an Answer and Motion to Dismiss admitting that it had entered into a contract with the U.S. Department of Veterans Affairs (VA) to provide non-emergency medical transportation exclusively and on behalf of the VA. CPC asserted that the Commission lacks jurisdiction to regulate the transportation of veterans on behalf of the VA because CPC was

operating under Federal law (the Veterans Benefits Act). CPC also filed for a contract carrier permit from the Commission (Case No. 19-0006-MC-CC). The Commission consolidated the two cases.

An ALJ issued a Recommended Decision finding that the Commission did not have jurisdiction to regulate intrastate transportation services procured exclusively by the VA and dismissed the cases because the state regulatory mechanism conflicts with Federal contracting goals. Metro filed Exceptions to the ALJ's Recommended Decision.

The Commission issued an Order denying the Exceptions filed by Metro and adopting the Recommended Decision as modified and supplemented. Since the Commission found, by a majority opinion, that it did not have jurisdiction, it determined that a ruling was not necessary on the permit application.

Metro filed an appeal of the Commission Order to the West Virginia Supreme Court of Appeals. Oral arguments are scheduled for February 9, 2021.

Jefferson County Vision v. Public Service Commission and Jefferson Utilities, et al.

The Commission granted Jefferson Utilities, Inc. (JUI) a certificate of convenience and necessity to extend potable water service to Jefferson Orchards to serve a manufacturing facility planned by ROXUL USA, Inc. and potential future commercial customers (Case No. 19-0059-W-C). The Commission granted the certificate, contingent on certain conditions. Jefferson County Vision, Inc. (JCV) filed a Petition to Intervene and a Petition for Reconsideration of the Commission decision, stating it had an interest in the certificate case because changes to the proposed project would likely increase JUI customer rates and that the project scope and plans had changed. The Commission dismissed the Formal Complaint because substantially similar issues were raised in the certificate case and the Commission had fully evaluated those issues. JVC appealed the Commission decision to the Supreme Court.

The Court heard oral arguments in this matter and affirmed the Commission decision. This case is now closed.

City of Kenova v. Public Service Commission of West Virginia and Rebecca Lynn Florczak

Ms. Florczak filed a Formal Complaint against the City of Kenova alleging the City wrongfully denied her a leak adjustment on her sewer bill (Case No. 18-1232-S-C). The Commission ordered the City to allow the adjustment. The City appealed the Commission Decision to the Supreme Court.

The Court heard oral arguments in this matter and affirmed the Commission decision. This case is now closed.

Informal Complaint Cases

Each year the Commission hears from customers who have issues paying or reconciling a utility bill or are experiencing service problems or difficulties in a variety of other areas. These cases are called Informal Complaint cases and are routed to Consumer Affairs Technicians in the Commission's Utilities and Water and Wastewater Divisions. The Commission received nearly 8,000 Informal Complaints in 2020.

The Consumer Affairs Technicians assist customers in negotiating payment plans, resolving communication problems or acting as liaisons between utilities and customers to resolve differences. If the problems are not resolved, customers have the option of filing a Formal Complaint with the Commission; however, Formal Complaint proceedings are much more time consuming and usually require attorney representation by the utility and, in some cases, by the customer.

An internal goal of closing at least 90% of all Informal Complaints within 30 days was set to lessen the need to file Formal Complaints. Difficulties in obtaining information from some smaller cable and phone companies and the challenges of isolating service problems related to electric, telephone and cable complaints impacted overall numbers in this area. Another internal goal is to resolve 95% of complaints at the informal level, further lessening the need to file Formal Complaints. Both of these goals were met in 2020.

Type of Utility	Number of Informal Complaints filed in 2020	Percentage of Informal Complaints that closed within 30 days	Number that became Formal Complaint Cases	Percentage of Informal Complaints that did <u>not</u> become Formal Complaint Cases
Water	2,847	95.44%	48	98.31%
Telephone	1,513	91.80%	24	98.41%
Electric	1,362	96.30%	19	98.60%
Sewer	1,131	95.80%	10	99.11%
Cable	814	82.20%	9	98.89%
Gas	275	97.40%	7	97.45%
Totals	7,942	93.72%	117	98.53%

APPENDIX A

Table of Abbreviations

AEP	American Electric Power Company
ALJ	Administrative Law Judge
APCo	Appalachian Power Company
CAD	Consumer Advocate Division
CAG	West Virginia Citizens Action Group
COP	Coefficient of Performance
CPI	Consumer Price Index
CRTS	Coal Resource Transportation System
CWA	Communication Workers of America, AFL-CIO
DEP	West Virginia Department of Environmental Protection
DOH	West Virginia Department of Highways
DSIC	Distribution System Improvement Charge
EIA	U.S. Energy Information Administration
ENEC	Expanded Net Energy Cost
EPA	U.S. Environmental Protection Agency
EWG	Electric Wholesale Generating Facility
FCC	Federal Communications Commission
FE	FirstEnergy Corporation
FERC	Federal Energy Regulatory Commission
FMCSA	Federal Motor Carrier Safety Administration
GI	General Investigation
GPS	Gas Pipeline Safety
HB	House Bill
ICAP	Installed Capacity
IOGA	Independent Oil and Gas Association
IREP	Infrastructure Replacement and Expansion Plans
LDC	Local Distribution Company

MACRUC	Mid-Atlantic Conference of Regulatory Utilities Commissioners
MMBTU	Million British Thermal Units
Mon Power	Monongahela Power Company
MW	Megawatt
NARUC	National Association of Regulatory Utilities Commissioners
NOV	Notice of Violation
PE	Potomac Edison West Virginia
PGWV	Peoples Gas West Virginia
PHMSA	Pipeline and Hazardous Materials Safety Administration
PJM	Pennsylvania, Jersey, Maryland Power Pool (RTO)
PSD	Public Service District
RTO	Regional Transmission Organization
SB	Senate Bill
SNAP	Supplemental Nutrition Assistance Program
SUN	Solar United Neighborhoods of West Virginia
SWVA	Steel of West Virginia
TCJA	2017 Federal Tax Cuts and Jobs Act
UCAP	Unforced Capacity
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
VMP	Vegetation Management Plan
WPCo	Wheeling Power Company
WVAW	West Virginia American Water
WVEUG	West Virginia Energy Users Group
WVIJDC	West Virginia Infrastructure and Jobs Development Council
WVONGA	West Virginia Oil and Natural Gas Association
WVSORO	West Virginia Surface Owners' Rights Organization

APPENDIX B

PSC Organization and Functions

The Public Service Commission of West Virginia consists of 13 Divisions and the Consumer Advocate Division. The Commission is supported in its work by a current staff of 222 employees, including many professionals, such as lawyers, engineers, economists and accountants. The CAD is physically separate and financially independent of the Commission and acts as an independent party representing residential customers in Commission proceedings.

Commission

The Commission regulates the rates, charges, acts and practices of those persons, firms and governmental subdivisions that provide public utility services, including electricity, natural gas, water, sewer, telephone landlines, solid waste disposal (landfills), gas pipeline safety and, to some extent, the transportation of persons and property for hire over the public highways of the state. The Commission sets statewide policies for utility regulation through rulemaking proceedings, investigates the acts and practices of regulated utilities, recommends statutory changes that affect utilities and the Commission, and sets the administrative policies for the agency. Motor carriers regulated by the Commission include taxi service, specialized limousine service, solid waste transportation service and third-party towing.

The Office of the Commission includes the Commissioners, the Communications and Quality Assurance Divisions, the Federal and Regional Regulatory Policy Advisor and support personnel.

Administration Division

The Administration Division is comprised of four sections.

The Budgets and Finance Section prepares Commission budgets; provides fiscal review and control; processes and monitors travel expenses, payables and receivables; oversees all procurement activities and ensures fixed assets are properly recorded and funded through assessment of public utilities or from grants and other programs. This Section is also responsible for managing the Commission's annually appropriated special revenue budget, Federal funds and non-appropriated special revenue funds. It also acts as the processing conduit for the collection and distribution of E-911 fees for the State of West Virginia.

The Human Resources Section oversees employee hiring and separations, administers

employee benefit programs, State grievance procedures and other personnel-related activities. This Section also processes payroll, taxes and benefit transactions for Commission employees.

The Information Technology Section manages the Commission's technical assets, including overseeing the Commission's computer system and service desk needs in conjunction with the State Office of Technology by providing programming, database and web design, training, support and other technical assistance. It also oversees the webcasts of the Commission hearings in Charleston.

The Facilities Management Section oversees the maintenance and upkeep of Commission office buildings, parking garage, vehicles and physical properties.

The Training Section coordinates and provides education and skills training for Commission employees and maintains training records for the agency.

Administrative Law Judges Division

The ALJ Division consists of attorneys and support staff who act in an adjudicatory role under the auspices of the Commission. The ALJs issue Recommended Decisions within time periods prescribed by the Commission or set by statute in cases referred to the ALJ Division by the Commission. A Recommended Decision becomes the Commission's Final Order in a case, unless modified or suspended by the Commission based on exceptions filed by one of the Parties or Staff of the Commission or suspended on Commission statutory authority.

The ALJ Division reviews a variety of cases involving public utilities, motor carriers, cable television and coal hauling on CRTS roads. The ALJs hold hearings and issue Recommended Decisions in cases involving quality of service or other complaints from consumers about utilities or motor carriers, rate change requests, applications for certificates of convenience and necessity to construct new or expand existing utility plants and petitions for numerous utility transactions regulated by the Commission. The ALJs are bound by the rules regarding *ex parte* contact with Parties in proceedings before the Commission.

Engineering Division

The Engineering Division, which is considered part of Commission Staff in formal cases, provides technical recommendations in cases before the Commission relating to rate requests, quality of service or billing disputes, engineering agreements, alternate main line extensions, certificates of convenience and necessity, mergers and acquisitions of utilities, service territory disputes, general investigations of utility operations and other cases requiring engineering expertise.

Engineering Staff provide technical assistance to customers and utility companies, supervise and certify utility meter tests, conduct water pressure tests, investigate voltage levels and other electrical complaints, investigate water taste and odor problems, investigate odor and other problems for sewer utilities, provide leak detection services, review utility construction estimates and undertake other technical tasks and studies as ordered by the Commission.

The Engineering Division provides recommendations to the Commission and the WVIJDC on the merits of proposed water and sewer projects, technical comments and assistance on proposed rules and regulations, information and assistance to governmental entities around the state and technical training for public service district board members and staff. The Engineering Division also assists in the preparation of the annual *Electric and Natural Gas Utilities Supply-Demand Forecasts* for the West Virginia Legislature.

Executive Secretary Division

The Executive Secretary Division is the public face of the Commission and maintains a complete record of all proceedings, acts, orders and judgments of the Commission and ensures that documents and pleadings in cases are available to the public in a timely fashion on the Commission website at www.psc.state.wv.us. The Division receives, processes and maintains in safe custody all documents, maps and papers filed in formal cases on the Commission's docket, processes all orders and schedules statewide hearings for the Commission and the ALJ Division.

The Executive Secretary Division receives and maintains all statutory records required for the Commission, including annual reports from regulated utilities; reviews utility reports for accuracy and compliance; processes all Commission Freedom of Information Act (FOIA) requests; receives and processes all formal complaints filed with the Commission, either online, by US Mail or in person; issues all tariffs for rate cases; and, when necessary, issues subpoenas at the direction of the Commission.

The Executive Secretary maintains and updates the Commission's Web Docket, provides copies of all orders, filings and case documents maintained by the Executive Secretary Division, all of which are available online without cost. This database separately lists each case on the formal docket and contains PDF files of every non-confidential document filed in each case. Documents filed in formal cases are docketed and scanned throughout the day and can be accessed within one hour of being received and linked to the Commission's website. The Executive Secretary Division processes all electronic case subscriptions through the Commission website, allowing individuals to track progress in cases and receive daily electronic notification of all activities in any docketed case. Public hearing schedules and logistical information pertaining to docketed cases are also available online.

Gas Pipeline Safety Division

The Gas Pipeline Safety Division is responsible for the application, oversight and enforcement of pipeline safety regulations under W.Va. Code §24B and is certified annually under 49 USC §60105 by the USDOT, PHMSA, Office of Pipeline Safety. The GPS Division oversees safety compliance with 49 CFR 191, 192, 195 and 199 for 97 regulated pipeline operators who operate approximately 14,000 miles of intrastate natural gas and hazardous liquid transmission and regulated gathering pipelines and natural gas distribution pipelines. They are also certified to inspect interstate transmission pipelines as an agent for and at the request of PHMSA.

GPS inspectors perform regularly scheduled (approximately every 18-24 months) inspections of all operators of intrastate natural gas and hazardous liquid transmission and regulated gathering pipelines, natural gas distribution pipelines and master meter systems to determine compliance with Federal and State regulations. The GPS Division maintains a multiyear master plan for the scheduling of routine inspections.

The GPS Division may conduct additional inspections based on complaints from the public, reports from other State agencies or as a follow up to previous inspections. Inspectors may lead or assist with accident investigations to determine the cause of the accident and to evaluate adherence to the required regulations. Unsatisfactory inspections may result in a variety of enforcement actions that are available to ensure compliance with pipeline safety regulations.

Pipeline operators are required to meet specific reporting requirements for certain events that occur on their pipeline facilities. The GPS Division operates a 24-hour emergency phone line to facilitate operators' notification of these events.

Office of the General Counsel

The Commission General Counsel acts as the chief legal advisor to the Commission on cases, policies and other issues facing the Commission. In addition to rendering legal advice to the Commission, the General Counsel represents the Commission in outside litigation and in other State and Federal court and agency proceedings, such as the Federal District and Circuit Courts, FERC and the FCC.

The Office of the General Counsel includes law clerks, an employment attorney and support personnel. The law clerks research regulatory matters involved in cases; prepare summaries of facts and issues in Commission deliberations and hearings and draft orders that are reviewed, revised and approved by the Commission. The General Counsel and law clerks are bound by the rules regarding *ex parte* contact with Parties in proceedings before the Commission. The employment attorney assists in the development of policy, tracks court opinions in human resources and employment law and researches and handles grievances and other employment issues.

Legal Division

The Legal Division provides legal assistance to the other Divisions and represents the Staff of the Commission in proceedings before the Commission and Administrative Law Judges for adjudication and resolution. The Legal Division is bound by the rules regarding *ex parte* contact with the Commission and the Commission's immediate staff.

The Commission Staff is a formal party to Commission proceedings. The Legal Division works with the technical and financial analysts to review the positions of all Parties in proceedings before the Commission and represents the Staff, not individual complainants, in matters before the Commission.

The Legal Division, in coordination with the General Counsel, represents the Commission before State and Federal courts and before other State and Federal agencies, including the West Virginia Infrastructure and Jobs Development Council, the Federal Energy Regulatory Commission and the Federal Communications Commission. The Legal Division assists in defending Commission Orders that are appealed to the West Virginia Supreme Court of Appeals. The Legal Division also helps develop responses to utility customers and utility company inquiries.

Transportation Division

The Transportation Division consists of seven operating sections. The Safety Enforcement Section performs safety inspections of motor vehicles operated by interstate and intrastate motor and private carriers, commercial motor vehicles and drivers. Officers enforce compliance with U.S. Department of Transportation safety criteria adopted by the Commission.

The Special Operations Section, in conjunction with the Federal Motor Carrier Safety Administration, conducts safety audits on newly-established motor carriers involved in interstate commerce and compliance reviews on interstate and intrastate motor carriers with lower than average safety ratings. It also monitors intrastate taxi carriers, but not Uber or Lyft, which are Transportation Network Companies monitored by the Department of Motor Vehicles.

The Motor Carrier Section conducts registration of intrastate and interstate motor carriers, collects registration fees, filing fees, insurance fees and hazardous materials assessments.

The Hazardous Material Registration Section is responsible for registration of hazardous materials being transported and for a multi-state project providing identification, registration and permitting of commercial motor vehicles carrying these materials in West Virginia.

The Coal Resource Transportation System (CRTS) Section is responsible for permitting vehicles on designated CRTS roads in 19 counties, imposing reporting requirements for

coal shippers and receivers, imposing administrative sanctions for violations and collecting the five-cents-per-ton fee for shipments of coal in excess of 88,000 pounds on CRTS roads.

The Railroad Safety Section is responsible for the administration and enforcement of Federal and State regulations governing the transportation of persons and property by rail.

The Logistics Section is responsible for commercial vehicle enforcement on the West Virginia Turnpike, the scheduling of special patrols to high accident areas and the procurement and inventory of all supplies and equipment to support the Transportation Division.

Utilities Division

The Utilities Division consists of accountants, auditors, financial analysts and economists, and provides accounting, audit, financial, economic and other technical assistance and analysis in Commission cases and processes. It is considered part of Commission Staff in formal cases. The Division participates in rate and other filings made by electric, natural gas, landline telephone, water and wastewater utilities, solid waste carriers, taxis, limousine services, tow operators and commercial solid waste facilities.

The Division is responsible for reviewing and making recommendations to the Commission about formal customer complaints filed against natural gas, electric, landline telephone, water and wastewater utilities, regulated motor carriers, commercial solid waste facilities and informal complaints or requests for assistance with regulated utility services. It also assists customers with quality of service complaints related to cable television, maintains a comparative database of motor carrier costs and rates and conducts financial and management audits of motor carriers

Water and Wastewater Division

The Water and Wastewater Division provides assistance in technical support, operations, engineering, design, financial analysis, accounting, ratemaking, Commission rules and policies and other regulatory matters to political subdivisions of the State that operate a water or sewer utility. It also provides assistance to private utilities with Commission rules and policies. It provides mandatory and optional training seminars on topics including safety, regulatory and legal requirements, project financing, personnel issues, terminations, customer service and basic accounting. The Division also makes field visits and, in collaboration with DEP and the Bureau for Risk and Insurance Management, publishes *The Pipeline*, a quarterly newsletter, available on the Commission's website: www.psc.state.wv.us.

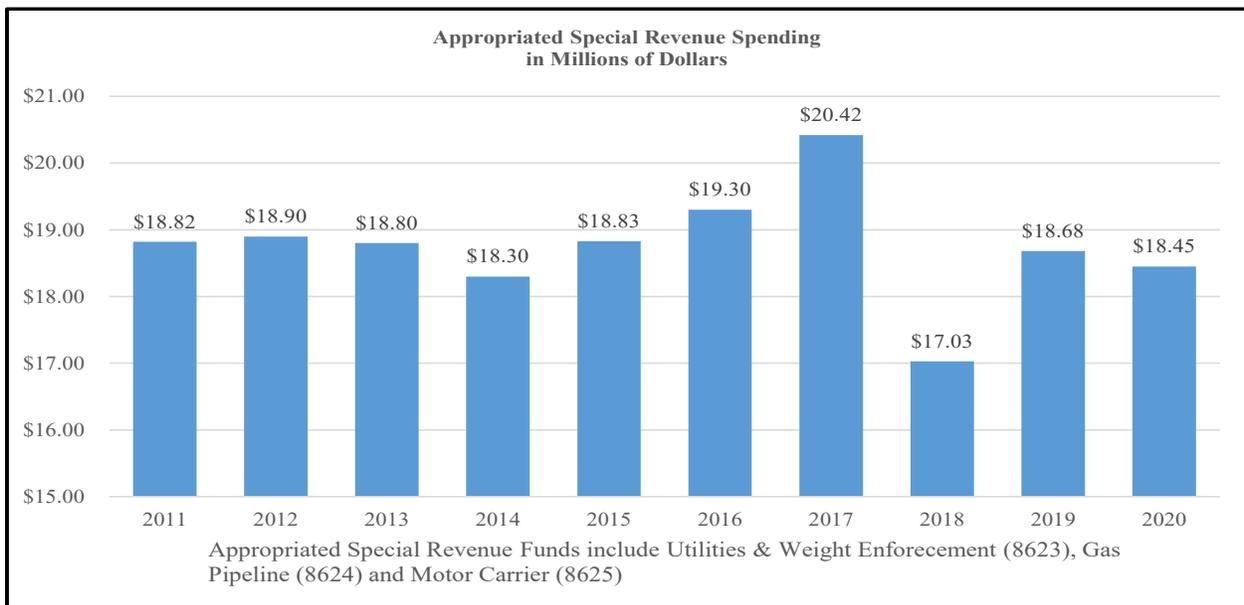
The Division is charged with reviewing, from a financial perspective, the preliminary applications to West Virginia Infrastructure and Jobs Development Council. It also reviews annual reports filed by water and wastewater utilities for quality and accuracy.

APPENDIX C

Budget & Human Resources

The Commission is committed to being a prudent steward of its stakeholder dollars and actively pursues and implements savings initiatives. Those projects have resulted in annualized savings in excess of \$1 million.

The Commission has maintained a relatively level appropriated special revenue fund for the past 13 years, except for an increase from 2015-2017 due the necessary building façade replacement project. The Commission's 2020 spending for all of its appropriated special revenue funds was approximately \$2 million less than in 2017.



Administration Division staff utilizes the wvOASIS and KRONOS systems for budgeting, financial and personnel transactions, recordkeeping, timekeeping and payroll processing.

By supporting staff's professional development, the Administration Division develops employees who are skilled at continuously reviewing processes and contracts and monitoring tasks that impact procurement activities. In return, these skilled professionals identify savings opportunities for the Commission.

APPENDIX D

Comparison of Change in West Virginia Residential Utility Rates

The following charts present a summary of the change in the rates paid by residential utility customers for electricity, natural gas and water in West Virginia over the past 10 years. The rate of change in the utility residential rates is compared to the rate of inflation as measured by the Consumer Price Index (CPI) for the same period of time.

The first chart shows the change in residential bills, reflecting representational usage levels for residential customers. The average bills shown represent the bills for a residential customer of the various utilities at the tariff rates in effect on January 1 of each of the years 2010 through 2020, and reflect usage at 1,000 kWh of electricity per month, 13 Mcf of natural gas per month and 4,500 gallons of water per month.

The second chart depicts the average rates of the selected utilities by industry sector serving the vast majority of the utility customers in West Virginia for the period. The calculated rates of change on a compounded annual basis are presented by measure of utility service, *i.e.*: per kWh for electricity, per Mcf for natural gas service and per 1,000 gallons of water for the water utility sector. For the electricity rate, this is the unweighted average residential rates for Appalachian Power Company, Wheeling Power Company, Monongahela Power Company and Potomac Edison West Virginia, which together serve over 95% of the state's population. The natural gas rates are the average unweighted residential rates for Mountaineer Gas and Hope Gas, which together serve approximately 90% of the natural gas customers in West Virginia. The water rates are the unweighted residential rates for customers in the nine largest cities in West Virginia. The detail for the individual utilities is provided on the second chart.

On average, the rates for electricity and water have increased at a slower rate than the rate of inflation for the past 10 years at 3.2%, 4.1% and 1.8%, respectively. The average change in the rate per Mcf for natural gas decreased over the past 10 years for residential customers in West Virginia, largely reflecting a decrease in the commodity cost of natural gas.

Comparison of Growth in West Virginia Residential Utility Rates to Changes in the CPI				
	Average Rate ¹		Total Increase	Compound Annual Growth Rate
	1/1/2010	1/1/2020		
Electricity - Per kWh	\$0.0859	\$0.1173	36.6%	3.2%
Gas - Per Mcf	\$10.4088	\$8.7473	-16.0%	-1.7%
Water - Per 1,000 Gals.	\$6.9481	\$10.4190	50.0%	4.1%
Composite CPI ²	\$216.6900	\$257.9700	19.1%	1.8%
1. The rate data is an unweighted average of the monthly bills of the selected utilities and usage levels reflected on "Electric, Gas, and Water Rate Comparisons," attached. 2. U. S. Department of Labor, Consumer Price Index for All Urban Customers, CPI-U, 1982-84 = 100				

Comparison of Growth in West Virginia Residential Utility Rate to Changes in the Consumer Price Index (CPI)

	1/1/10	1/1/11	1/1/12	1/1/13	1/1/14	1/1/15	1/1/16	1/1/17	1/1/18	1/1/19	1/1/20	Compound Annual Change % 2009-2019
1000 kWh - Residential Schedule												
APCo	\$80.39	\$86.31	\$96.39	\$96.75	\$93.99	\$93.99	\$109.82	\$120.93	\$120.93	\$115.04	\$128.21	4.78%
WPCo	\$80.39	\$86.31	\$96.39	\$96.75	\$93.99	\$93.99	\$109.82	\$120.93	\$120.93	\$115.04	\$128.21	4.78%
Mon Power	\$91.38	\$95.88	\$99.35	\$94.31	\$93.71	\$92.62	\$109.54	\$112.02	\$110.53	\$105.83	\$106.45	1.54%
PE	\$91.38	\$95.88	\$99.35	\$94.31	\$93.71	\$92.62	\$109.54	\$112.02	\$110.53	\$105.83	\$106.45	1.54%

13 Mcf Gas - Residential Schedule

Mountaineer Gas	\$149.98	\$134.92	\$126.72	\$113.13	\$118.29	\$131.22	\$117.29	\$111.76	\$120.73	\$119.00	\$119.68	-2.23%
Hope/Dominion	\$120.65	\$117.12	\$138.78	\$125.50	\$121.17	\$114.86	\$87.82	\$91.50	\$110.18	\$118.88	\$107.75	-1.12%

4.5 Thousand Gallons Water - Residential Schedule

Beckley	\$30.17	\$30.17	\$30.17	\$33.35	\$33.35	\$33.35	\$36.85	\$36.85	\$36.85	\$39.62	\$39.62	2.76%
Charleston	\$48.36	\$48.36	\$50.50	\$50.50	\$54.07	\$54.07	\$54.07	\$62.96	\$64.24	\$64.24	\$75.14	4.51%
Clarksburg	\$26.55	\$31.32	\$32.67	\$33.71	\$34.79	\$34.79	\$34.79	\$34.79	\$34.79	\$34.79	\$34.79	2.74%
Huntington	\$48.36	\$48.36	\$50.50	\$50.50	\$54.07	\$54.07	\$54.07	\$62.96	\$64.24	\$64.24	\$75.14	4.51%
Martinsburg	\$28.33	\$28.33	\$28.33	\$28.33	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	\$34.00	1.84%
Montgomery	\$48.36	\$48.36	\$50.50	\$50.50	\$54.07	\$54.07	\$54.07	\$62.96	\$64.24	\$64.24	\$75.14	4.51%
Morgantown	\$8.98	\$8.98	\$17.42	\$17.42	\$17.42	\$17.42	\$17.42	\$23.18	\$23.18	\$23.18	\$23.18	9.95%
Parkersburg	\$23.80	\$29.93	\$33.18	\$34.98	\$34.98	\$34.98	\$34.98	\$34.98	\$34.98	\$34.98	\$34.98	3.93%
Wheeling	\$18.51	\$19.44	\$19.44	\$19.44	\$29.98	\$29.98	\$29.98	\$29.98	\$29.98	\$29.98	\$29.98	4.94%

1. Effective November 1, 2001, all residential customers formerly served by Shenandoah Gas are served under the tariff of Mountaineer Gas Company

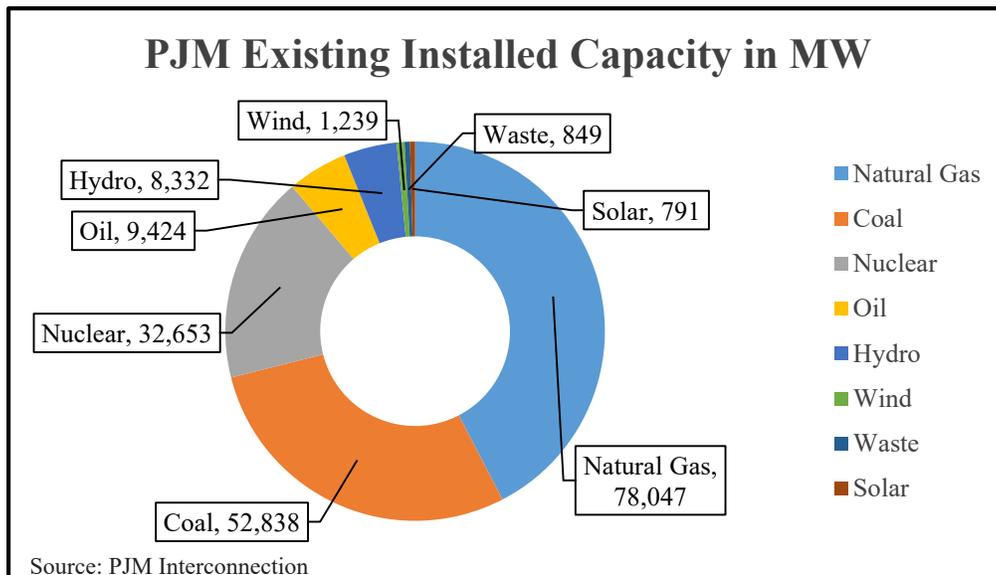
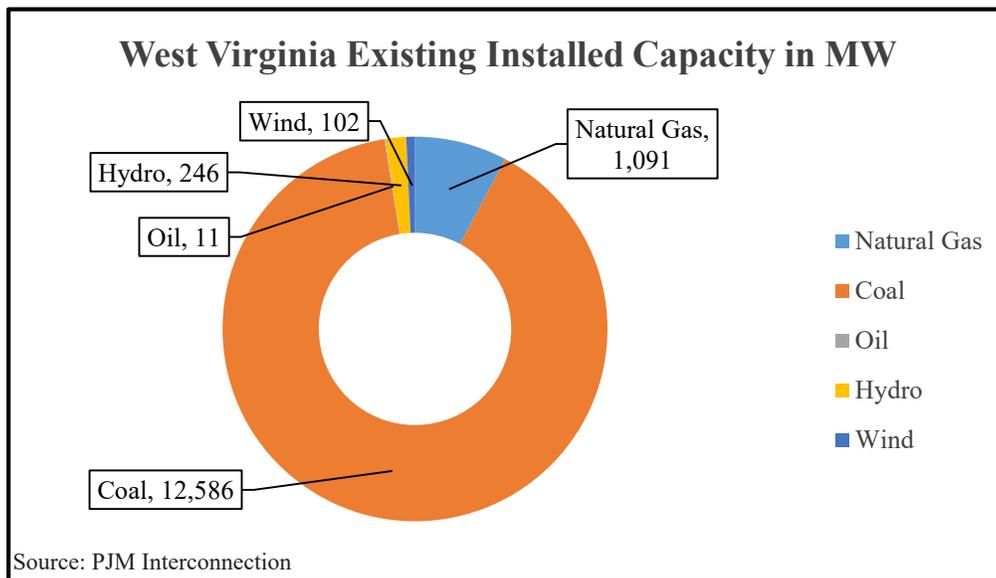
2. Effective January 1, 2003, all residential customers formerly served by West Virginia Power are served under the tariff of Monongahela Power Company

3. Effective November 1, 2005, all residential customers formerly served by West Virginia Power Gas Service are served under the tariff of Mountaineer Gas Company

APPENDIX E

Electric Generating Capacity in West Virginia and PJM by Fuel Source

The following charts illustrate the existing installed electric generating capacity by fuel source in West Virginia and within PJM as of December 31, 2019. PJM is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia, including all of West Virginia. Coal fired generation represents about 89.7% of the installed capacity in the West Virginia territory, while natural gas represents approximately 7.8%. Overall in PJM, coal represents about 28.7% of installed capacity with natural gas representing approximately 42.4%.



APPENDIX F

Electric and Gas Residential Rate Comparison

Average Annual Electricity and Natural Gas per Unit Prices by State

Average annual electric and natural gas prices for all states, including West Virginia, are compiled from information taken from the Energy Information Administration (EIA) data bases. Average propane and fuel oil costs are also taken from EIA data.

State-by-state average electric and gas rates are shown in the following tables. For ease of comparison of West Virginia electric and natural gas rates to those in neighboring states, we have highlighted West Virginia and neighboring states.

Table 1: Average Residential Electric Rates 11/2019 - 10/2020			
Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
	United States Average	13.2 ¢ per Kwh	100%
1	Louisiana	9.5 ¢ per Kwh	72%
2	Washington	9.7 ¢ per Kwh	74%
3	Oklahoma	10.0 ¢ per Kwh	76%
4	Idaho	10.0¢ per Kwh	76%
5	Arkansas	10.3 ¢ per Kwh	78%
6	Utah	10.5 ¢ per Kwh	80%
7	North Dakota	10.6 ¢ per Kwh	81%
8	Tennessee	10.8 ¢ per Kwh	82%
9	Kentucky	10.9 ¢ per Kwh	83%
10	Missouri	10.9 ¢ per Kwh	83%
11	Nebraska	11.0 ¢ per Kwh	83%
12	Nevada	11.0 ¢ per Kwh	84%
13	Oregon	11.1 ¢ per Kwh	84%
14	Wyoming	11.3 ¢ per Kwh	86%
15	Mississippi	11.3 ¢ per Kwh	86%
16	Montana	11.5 ¢ per Kwh	88%
17	North Carolina	11.6 ¢ per Kwh	88%
18	Florida	11.6 ¢ per Kwh	88%
19	Georgia	11.6 ¢ per Kwh	88%
20	West Virginia	11.8 ¢ per Kwh	89%
21	South Dakota	11.8 ¢ per Kwh	90%
22	Texas	11.9 ¢ per Kwh	91%
23	Ohio	12.1 ¢ per Kwh	92%

Table 1: Average Residential Electric Rates 11/2019 - 10/2020			
Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
24	Virginia	12.2 ¢ per Kwh	93%
25	Colorado	12.3 ¢ per Kwh	93%
26	Arizona	12.3 ¢ per Kwh	94%
27	Indiana	12.5 ¢ per Kwh	95%
28	Alabama	12.6 ¢ per Kwh	96%
29	District of Columbia	12.7 ¢ per Kwh	97%
30	Kansas	12.7 ¢ per Kwh	97%
31	Delaware	12.7 ¢ per Kwh	97%
32	South Carolina	12.8 ¢ per Kwh	97%
33	Iowa	12.9 ¢ per Kwh	98%
34	New Mexico	12.9 ¢ per Kwh	98%
35	Illinois	13.0 ¢ per Kwh	99%
36	Maryland	13.1 ¢ per Kwh	99%
37	Minnesota	13.3 ¢ per Kwh	101%
38	Pennsylvania	13.7 ¢ per Kwh	104%
39	Wisconsin	14.7 ¢ per Kwh	112%
40	New Jersey	15.9 ¢ per Kwh	121%
41	Michigan	16.3 ¢ per Kwh	124%
42	Maine	17.0 ¢ per Kwh	129%
43	New York	18.2 ¢ per Kwh	138%
44	New Hampshire	19.3 ¢ per Kwh	146%
45	Vermont	19.5 ¢ per Kwh	148%
46	California	20.3 ¢ per Kwh	154%
47	Rhode Island	22.0 ¢ per Kwh	167%
48	Massachusetts	22.1 ¢ per Kwh	168%
49	Connecticut	22.6 ¢ per Kwh	172%
50	Alaska	23.1 ¢ per Kwh	175%
51	Hawaii	30.8 ¢ per Kwh	234%

Table 2: Average Commercial Electric Rates 11/2019 - 10/2020			
Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
	United States Average	10.6 ¢ per Kwh	100%
1	Nevada	7.5 ¢ per Kwh	70%
2	Oklahoma	7.6 ¢ per Kwh	72%
3	Idaho	7.7 ¢ per Kwh	72%
4	Texas	7.8 ¢ per Kwh	73%
5	Virginia	7.8 ¢ per Kwh	74%
6	Utah	8.3 ¢ per Kwh	79%

7	Pennsylvania	8.6 ¢ per Kwh	81%
8	Arkansas	8.6 ¢ per Kwh	81%
9	Louisiana	8.7 ¢ per Kwh	82%
10	North Carolina	8.8 ¢ per Kwh	83%
11	Missouri	8.8 ¢ per Kwh	83%
12	Washington	8.9 ¢ per Kwh	84%
13	Oregon	9.0 ¢ per Kwh	84%
14	Illinois	9.0 ¢ per Kwh	85%
15	North Dakota	9.0 ¢ per Kwh	85%
16	Nebraska	9.0 ¢ per Kwh	85%
17	Florida	9.1 ¢ per Kwh	86%
18	Delaware	9.3 ¢ per Kwh	88%
19	West Virginia	9.4 ¢ per Kwh	88%
20	Ohio	9.4 ¢ per Kwh	89%
21	South Dakota	9.5 ¢ per Kwh	90%
22	Wyoming	9.7 ¢ per Kwh	91%
23	Georgia	9.8 ¢ per Kwh	92%
24	Maryland	9.8 ¢ per Kwh	92%
25	Arizona	10.1 ¢ per Kwh	96%
26	Iowa	10.2 ¢ per Kwh	96%
27	Colorado	10.3 ¢ per Kwh	97%
28	Kentucky	10.3 ¢ per Kwh	97%
29	New Mexico	10.3 ¢ per Kwh	97%
30	Kansas	10.3 ¢ per Kwh	97%
31	South Carolina	10.5 ¢ per Kwh	98%
32	Minnesota	10.5 ¢ per Kwh	99%
33	Mississippi	10.5 ¢ per Kwh	99%
34	Tennessee	10.6 ¢ per Kwh	100%
35	Montana	10.6 ¢ per Kwh	100%
36	Indiana	10.9 ¢ per Kwh	103%
37	Wisconsin	11.0 ¢ per Kwh	103%
38	Alabama	11.6 ¢ per Kwh	109%
39	Michigan	11.7 ¢ per Kwh	110%
40	District of Columbia	12.1 ¢ per Kwh	114%
41	New Jersey	12.4 ¢ per Kwh	116%
42	Maine	12.5 ¢ per Kwh	117%
43	New York	14.3 ¢ per Kwh	135%
44	New Hampshire	15.4 ¢ per Kwh	145%
45	Rhode Island	15.9 ¢ per Kwh	150%
46	Massachusetts	16.1 ¢ per Kwh	152%
47	Vermont	16.4 ¢ per Kwh	154%
48	Connecticut	17.0 ¢ per Kwh	160%
49	California	17.4 ¢ per Kwh	164%
50	Alaska	19.9 ¢ per Kwh	188%
51	Hawaii	29.0 ¢ per Kwh	273%

Table 3: Average Industrial Electric Rates 11/2019 - 10/2020			
Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
	United States Average	6.7 ¢ per Kwh	100%
1	Oklahoma	4.5 ¢ per Kwh	67%
2	Louisiana	4.8 ¢ per Kwh	72%
3	Washington	5.0 ¢ per Kwh	75%
4	Montana	5.1 ¢ per Kwh	76%
5	Texas	5.2 ¢ per Kwh	78%
6	Kentucky	5.2 ¢ per Kwh	79%
7	Tennessee	5.4 ¢ per Kwh	81%
8	Nevada	5.4 ¢ per Kwh	81%
9	New York	5.5 ¢ per Kwh	82%
10	Georgia	5.5 ¢ per Kwh	82%
11	New Mexico	5.5 ¢ per Kwh	83%
12	Mississippi	5.7 ¢ per Kwh	86%
13	Arkansas	5.7 ¢ per Kwh	86%
14	Alabama	5.9 ¢ per Kwh	88%
15	Utah	5.9 ¢ per Kwh	88%
16	Ohio	5.9 ¢ per Kwh	89%
17	Idaho	5.9 ¢ per Kwh	89%
18	South Carolina	5.9 ¢ per Kwh	89%
19	Oregon	6.0 ¢ per Kwh	90%
20	West Virginia	6.1 ¢ per Kwh	91%
21	Arizona	6.1 ¢ per Kwh	91%
22	Pennsylvania	6.2 ¢ per Kwh	93%
23	North Carolina	6.2 ¢ per Kwh	93%
24	Illinois	6.4 ¢ per Kwh	96%
25	Missouri	6.5 ¢ per Kwh	98%
26	Iowa	6.6 ¢ per Kwh	98%
27	Virginia	6.6 ¢ per Kwh	99%
28	Indiana	6.8 ¢ per Kwh	102%
29	Wyoming	6.9 ¢ per Kwh	103%
30	Kansas	7.2 ¢ per Kwh	107%
31	Delaware	7.2 ¢ per Kwh	107%
32	Colorado	7.2 ¢ per Kwh	108%
33	Florida	7.2 ¢ per Kwh	109%
34	Michigan	7.4 ¢ per Kwh	112%
35	Nebraska	7.5 ¢ per Kwh	112%
36	Wisconsin	7.6 ¢ per Kwh	114%
37	Maryland	7.7 ¢ per Kwh	116%
38	South Dakota	7.8 ¢ per Kwh	117%
39	North Dakota	7.9 ¢ per Kwh	118%
40	Minnesota	7.9 ¢ per Kwh	119%

Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
41	District of Columbia	8.1 ¢ per Kwh	121%
42	Maine	9.0 ¢ per Kwh	135%
43	New Jersey	10.0 ¢ per Kwh	150%
44	Vermont	11.0 ¢ per Kwh	165%
45	New Hampshire	12.8 ¢ per Kwh	192%
46	Connecticut	13.4 ¢ per Kwh	201%
47	Massachusetts	13.4 ¢ per Kwh	201%
48	California	14.1 ¢ per Kwh	212%
49	Rhode Island	15.6 ¢ per Kwh	234%
50	Alaska	16.8 ¢ per Kwh	252%
51	Hawaii	24.7 ¢ per Kwh	370%

Rank Lowest to Highest Rate	State	Average Residential Rates	Percentage of U.S. Average
	United States Average	\$9.32	100%
1	North Dakota	\$5.72	61%
2	New Mexico	\$5.82	63%
3	Colorado	\$6.09	65%
4	Idaho	\$6.22	67%
5	Iowa	\$6.26	67%
6	South Dakota	\$6.30	68%
7	Illinois	\$6.39	69%
8	Nebraska	\$6.47	69%
9	Montana	\$6.64	71%
10	Wisconsin	\$6.93	74%
11	Indiana	\$7.10	76%
12	Minnesota	\$7.21	77%
13	Oklahoma	\$7.23	78%
14	Wyoming	\$7.23	78%
15	Kansas	\$7.38	79%
16	Michigan	\$7.40	79%
17	Ohio	\$7.55	81%
18	Utah	\$7.95	85%
19	Tennessee	\$8.01	86%
20	Missouri	\$8.79	94%
21	Texas	\$8.89	95%
22	West Virginia	\$9.16	98%
23	Kentucky	\$9.22	99%
24	Mississippi	\$9.43	101%

Table 4: Natural Gas Rates per Mcf - Winter 2019/2020			
Rank Lowest to Highest Rate	State	Average Residential Rates	Percent of U.S. Average
25	New Jersey	\$9.55	102%
26	Nevada	\$9.95	107%
27	Arkansas	\$10.08	108%
28	Washington	\$10.21	110%
29	Oregon	\$10.40	112%
30	Pennsylvania	\$10.55	113%
31	Louisiana	\$10.57	113%
32	Alaska	\$10.79	116%
33	South Carolina	\$11.00	118%
34	District of Columbia	\$11.40	122%
35	New York	\$11.56	124%
36	North Carolina	\$11.57	124%
37	Maryland	\$11.62	125%
38	Virginia	\$11.62	125%
39	Georgia	\$11.79	127%
40	Arizona	\$11.81	127%
41	Vermont	\$11.94	128%
42	Delaware	\$12.07	130%
43	Connecticut	\$12.82	138%
44	California	\$13.55	145%
45	Maine	\$13.78	148%
46	Massachusetts	\$14.08	151%
47	Rhode Island	\$14.12	152%
48	New Hampshire	\$14.31	154%
49	Alabama	\$14.87	160%
50	Florida	\$20.62	221%
51	Hawaii	\$44.09	473%

Alternative Fuels Heating Cost Comparisons

In the past, the Commission presented comparisons of monthly heating costs using natural gas, fuel oil, propane and electricity in the annual Management Summary Report. The alternative fuel heating bill comparisons have not been included in recent reports, but we have reinstated those comparisons this year.

The amount of fuel used for heating purposes depends on factors such as fuel used, efficiency of equipment and weather conditions. For purposes of the heating bill comparisons, we use 15.4 million British thermal units (MMBTU) of heat output from the heating equipment. Usage levels of electricity, fuel oil and natural gas are all calculated at a level necessary to produce 15.4 MMBTU of heat output based on the efficiency of the heating equipment used.

The efficiency of natural gas and oil furnaces depends on a variety of factors, including the age of the furnace. Older gas furnaces may be as low as 65% efficient in converting fuel heat content into room heat. However, newer gas furnaces will have efficiency levels between 70% and 90%. Since gas furnaces that are less than 20 years old should have an original efficiency rating in the mid-70% range or higher, we use 75% and 90% efficiency levels for calculating natural gas heating costs. Typically, oil furnaces tend to have lower efficiency than newer gas furnaces. For that reason, we use 65% efficiency for a lower-efficiency oil furnace and 85% efficiency for a higher-efficiency oil furnace.

The efficiency, or Coefficient of Performance (COP), of heat pumps depends on the age and construction of the heat pump and the operating conditions. Some lower-efficiency heat pumps may struggle to maintain a COP of 2.0 when outside temperatures drop below freezing. When outside temperatures are above freezing, a well-maintained modern heat pump can be expected to achieve a COP of 3.0 or higher. We have calculated the heating cost using electric heat pumps at COPs of 2.0 and 3.0.

To achieve a 15.4 MMBTU level of heat output requires various levels of fuel input depending on the fuel source and the equipment used, as shown in the following table.

Fuel and Equipment	Fuel Input	Heat Output
75% Efficiency Natural Gas Furnace	20.5 Mcf	15.4 MMBTU
90% Efficiency Natural Gas Furnace	17.1 Mcf	15.4 MMBTU
65% Efficiency No. 2 Fuel Oil Furnace	170.4 gallons	15.4 MMBTU
85% Efficiency No. 2 Fuel Oil Furnace	130.3 gallons	15.4 MMBTU
75% Efficiency Propane Furnace	239.9 gallons	15.4 MMBTU
90% Efficiency Propane Furnace	186.6 gallons	15.4 MMBTU
Electric Resistance Heating	4,500 Kwh	15.4 MMBTU
Electric Heat Pump at 2.0 Coefficient of Performance	2,250 Kwh	15.4 MMBTU
Electric Heat Pump at 3.0 Coefficient of Performance	1,500 Kwh	15.4 MMBTU

For purposes of calculating comparative monthly heating cost, we used the average cost of propane and heating oil during the winter of 2019/2020 (October 2019 through March 2020) published by the EIA. There is no published propane and heating oil data for only West Virginia, so we used an average of the EIA data for the Middle Atlantic and Southern Atlantic regions. These regions include Maryland, Pennsylvania and Virginia.

Monthly electric bills are calculated using the rates of APCo and Mon Power that are in effect as of January 15, 2021. Average electricity cost per Kwh will tend to be lower at higher levels of usage because of the effect of fixed charges and declining block rates. This is more noticeable for APCo which has a declining block rate design that differs from that of Mon Power. Since the electricity rates used for the purposes of this alternative fuel

comparison are company specific and are based on the higher usage levels associated with heating, they differ from the statewide annual average cost of electricity data published by EIA.

Monthly gas bills are calculated using the rates of Dominion Hope and Mountaineer Gas Company that are in effect as of January 15, 2021.

Alternative Fuels Cost Comparison for 15.4 Million BTUs of Heat Output per Month				
Type of Fuel and Equipment	Heat Output	Fuel Input Units	Fuel Cost per Unit	Total Monthly Cost
	MBTU		\$	\$
Dominion Hope, dba Dominion Energy WV				
Natural Gas (75% Efficiency)	15.4	20.5 Mcf	\$7.99	\$163.74
Natural Gas (90% Efficiency)	15.4	17.1 Mcf	\$8.07	\$138.08
Mountaineer Gas Company				
Natural Gas (75% Efficiency)	15.4	20.5 Mcf	\$8.69	\$178.14
Natural Gas (90% Efficiency)	15.4	17.1 Mcf	\$8.80	\$150.45
Fuel Oil (65% Efficiency)	15.4	170.4 Gallons	\$2.90	\$494.16
Fuel Oil (85% Efficiency)	15.4	130.3 Gallons	\$2.90	\$377.87
Propane (75% Efficiency)	15.4	223.9 Gallons	\$2.53	\$566.57
Propane (90% Efficiency)	15.4	186.6 Gallons	\$2.53	\$472.10
Appalachian Power Company and Wheeling Power Company (AEP)				
Electric Resistance Heat	15.4	4,500 Kwh	\$0.104	\$468.59
Heat Pump (2.0 Coefficient of Performance)	15.4	2,250 Kwh	\$0.117	\$236.06
Heat Pump (3.0 Coefficient of Performance)	15.4	1,500 Kwh	\$0.130	\$194.55
Monongahela Power Company and Potomac Edison Power Company (First Energy)				
Electric Resistance Heat	15.4	4,500 Kwh	\$0.101	\$453.88
Heat Pump (2.0 Coefficient of Performance)	15.4	2,250 Kwh	\$0.102	\$229.44
Heat Pump (3.0 Coefficient of Performance)	15.4	1,500 Kwh	\$0.103	\$154.63

APPENDIX G

Electric Utilities Supply – Demand Forecast 2021 - 2030

Executive Summary

Electric utility supply resources and capacity planning has changed since the creation of Regional Transmission Organizations (RTO) and RTO-wide Capacity and Energy Markets. Moreover, due to environmental regulations and economics of generation, older and less-efficient coal-fired generating facilities have been retired and cancellation of long-standing capacity agreements and inter-utility supply contracts has occurred, contributing to the need for alternative capacity resources.

Because West Virginia electric utilities are now operating within the PJM RTO, it is important to understand and use certain PJM labels regarding generation resource supply, or capacity, and peak demand requirements.¹ Historically, generation resource capacity was stated at its Installed Capacity level, or ICAP. PJM calculates a reliability factor for each generating unit based on the availability of the unit at times of PJM system peaks and downgrades the ICAP value to an availability level referred to as Unforced Capacity or UCAP. PJM also includes a reserve requirement in its representation of peak loads. Thus, PJM peak loads are referred to as “reserve-adjusted loads” or, to match the capacity resource they are measured against, simply as UCAP loads.

APCo and WPCo will have marginally adequate capacity for summer requirements. Mon Power and PE will have negative excess reserve margins during the forecast period. The general conclusions reached in this report are:

- APCo/WPCo projected electrical demand will continue to decrease at a modest rate, due mainly to a shrinking residential customer base.
- For Mon Power/PE we expect a modest growth rate in electrical demand, influenced by increased load related to natural gas activity in its operating territory.
- PJM has implemented new Capacity Performance Rules that require enhanced levels of availability of capacity resources and that increase penalties for nonperformance during certain peak load conditions. These rules affect both APCo and Mon Power. A major result of these rules is to reduce the capacity values assigned to solar, hydro, pumped storage and wind resources.

¹ This supply/demand report addresses the supply of electric generation capacity necessary to meet peak demands. In that context, “supply” is synonymous with the word “capacity” and “demand” is synonymous with the word “load.” The terms are sometimes used interchangeably in this report.

- As in our 2019 report, we believe that instead of using ICAP to represent utility available capacity, it is appropriate to use the reduced capacity value, referred to as UCAP, assigned annually to each generation unit by PJM.
- Because PJM calculates a capacity requirement based on projected peak loads that includes both diversity and reserves for each utility, it is appropriate to use the same adjusted load approach, referred to as UCAP load, in the this report.
- Until recently, the Commission measured reserve margins as a percentage of total ICAP in excess of actual, unadjusted internal peak load requirements (ICAP load). Using that calculation, when reserve margins dropped below 15-16%, we anticipated an approaching need to acquire new capacity. This approach is different from the PJM approach to represent load requirements that include reserve requirements and to downgrade generation resources to reflect availability of individual units.

As an example of different reserve margin pictures when reserves are built into the load number, if a utility had a projected peak demand load requirement of 5,200 MW and nameplate rated capacity resources of 6,000 MW of ICAP, we would have historically calculated a reserve of 800 MW, or 15.4%. The 15.4% reserve margin would likely have signaled the need to consider additional capacity resources or load reduction measures.

For PJM power supply purposes, however, the same load is adjusted upward to include a PJM targeted reserve and the capacity is adjusted downward to a UCAP value that reflects a reduced capacity value based on historical peak availability of individual units.

For example, if PJM targeted a 15.4% reserve margin and it assumed that capacity should be valued at 95% of its nameplate rating, it would calculate a reserve-adjusted load of approximately 5,730 MW instead of 5,200, and it would value the capacity at only 5,700 MW UCAP instead of 6,000 MW ICAP. Thus, while the 5,200 MW actual load and 6,000 MW ICAP reflects a 15.4% reserve margin, as historically calculated by the Commission, the same load adjusted upward to build in a reserve margin, and the same generation capacity adjusted downward to UCAP would result in a calculated reserve of zero for PJM power supply purposes.

Thus, while historically a reserve margin of around 15-16% was considered a target where new generation was needed to meet reliability standards, using the PJM methods of representing capacity requirements a reserve margin of 0% is the target where new generation is needed. A comparison of the two methods of representing reserves is shown in the following table.

Historical Calculation Based on Metered Load and Nameplate Generator Capacity			PJM Calculation Based on Load Adjusted to Include Reserve Requirements and Availability Adjusted UCAP Generator Capacity		
Peak Load	(A)	5,200	Peak Load Reserves	5,700	MW
Installed Capacity (ICAP)	(B)	6,000	PJM Assigned UCAP	5,700	MW
Reserves	(C) = (B) - (A)	800	Reserves	-	MW
Reserve Percentage	(C) / (A)	15.40%	Reserve Percentage	0.00%	

- We have adopted the PJM approach to representing reserve margins. Using this approach, there are reserves already built into UCAP load and generating capacity is reduced from the ICAP level to the PJM UCAP level. Therefore, lower reserve margins than those historically presented in the annual *Electric Utilities Supply-Demand Forecast* are expected. For reliability, UCAP capacity over UCAP load of 15-16% is no longer indicative of a need to plan new capacity resources.
- Both APCo and Mon Power face declining reserve margins above their PJM UCAP.
- As these margins drop below zero, additional capacity resources will be required.

General Discussion

Under the provisions of W. Va. Code § 24-1-1(d)(3), the Commission is required to report to the Legislature annually on the 10-year supply and demand balance for the electric utilities in West Virginia. Commission staff conducts an annual examination of long-term demand forecasts and resource plans of the major electric utilities in West Virginia. Staff evaluates the plans and underlying assumptions and reasonableness of the forecasts when preparing the annual *Electric Utilities Supply-Demand Forecast*. In addition, staff compares actual experience to prior projections and trends in demand to prepare its own independent forecast, which may deviate from the utility projections. These staff-adjusted forecasts are reflected in this report.

The four largest regulated electric utilities in West Virginia are APCo, WPCo, Mon Power and PE. APCo and WPCo are affiliate companies of American Electric Power (AEP). Mon Power and PE are affiliate companies of FirstEnergy (FE). These four electric utilities account for approximately 96% of West Virginia residential sales and 98% of West Virginia commercial and industrial sales. APCo, WPCo and Mon Power are regulated electric transmission and distribution utilities that also own generation facilities. PE is a distribution and transmission utility in West Virginia, but does not own any generation facilities.

For purposes of this report, APCo and WPCo data are combined, providing the supply and demand forecast as a single entity based on their combined supply resources and projected demand. Since APCo serves significant load in Virginia and must plan to meet both its West

Virginia and Virginia customers' requirements, we project APCo requirements and resources on a total company basis. Reference to APCo includes the total company supply resources and load of APCo, including Virginia data, plus the total company supply resources and load of WPCo, which operates only in West Virginia.

Mon Power and the PE West Virginia operations data are similarly combined. Reference to Mon Power includes supply resources and load of Mon Power, which operates only in West Virginia, plus the load of the PE West Virginia operations.

Five independent non-generation electric utilities in West Virginia currently operate distribution systems providing power to local residential, commercial and industrial customers at retail rates. Those utilities are:

- Harrison Rural Electrification Association, Inc.
- Black Diamond Power Company
- Craig-Botetourt Electric Cooperative
- City of New Martinsville
- City of Philippi

Those companies purchase their power requirements from various generators operating in the regional area served by PJM. They have historically relied on medium to long-term contracts with wholesale providers, but can also purchase available energy and capacity in the PJM markets when planning their power supply requirements.

The PJM organization manages both the bulk-power transmission system and a competitive capacity and energy markets within its 13 state (plus the District of Columbia) footprint. The PJM capacity and energy markets have become the major source of power supply for many customers and load-serving entities in the PJM Region.

AEP and FE companies prepare an Integrated Resource Plan (IRP). An IRP considers supply options to economically meet future net demand requirements. The IRP includes projected equipment upgrades, re-rating of plants, retirement of internal generation resources, additional internal generation resources, demand side resources and purchased capacity, if needed. An IRP also considers possible future demand impacts of energy-saving technologies and equipment installed by customers that will also control or reduce demand. Staff reviews this information and its own independent projections to compare capacity to the projected loads.

This report is not an IRP. It does project demand requirements over a 10-year time frame, but does not project or analyze optional supply additions that might be considered to meet any supply shortfalls. It does, however, reflect any specifically planned future supply changes such as generation upgrading, downgrading, re-rating or retirement and supply contract additions or cancellations.

EPA Affordable Clean Energy Rule

On August 21, 2018, the EPA issued a new proposed rule targeting carbon emissions from existing fossil-fuel-fired electricity generating plants. The 2018 Rule is referred to as the Affordable Clean Energy Rule (ACE). Unlike the previous EPA Clean Power Plan, which set carbon dioxide limits on a statewide basis and required both inside and outside the plant carbon-reducing technologies, the ACE Rule:

1. Defines the best system of emission reduction for existing power plants as onsite, heat-rate efficiency improvements;
2. Provides states with a list of candidate technologies that can be used to establish standards of performance and be incorporated into State plans;
3. Updates the New Source Review permitting program to further encourage efficiency improvements at existing power plants;
4. Aligns regulations under the Clean Air Act §111(d) to give states adequate time and flexibility to develop their State plans; and,
5. Gives states flexibility to consider unit-specific factors, including a particular unit's remaining useful life, when it comes to standards of performance.

The West Virginia Department of Environmental Protection is currently considering a State plan to implement the ACE Rules. It is premature to estimate or model how the ACE Rules will affect the future supplies of electricity in West Virginia. No assumptions regarding the impact of the ACE Rules on West Virginia's electricity supply or demand are made in this report.

Summer versus Winter Peaks

PJM incurs its peak capacity requirements in the summer and plans its capacity resources accordingly. APCo and Mon Power are required to acquire enough capacity to meet their load obligation based on the PJM summer peak, even though their individual internal peak demands occur during the winter. Because of the requirement to have enough capacity to meet their summer peak loads and because of the availability of energy from the PJM market to meet their expected higher winter loads, the Commission now evaluates the APCo and Mon Power supply and demand during the summer months.

For the forecast period of summer 2021 through 2030:

1. We expect the combined APCo/WPCo demands to decrease over the forecast period by approximately 4.3%.
2. We expect Mon Power demands to increase by approximately 9.4% over the forecast period.
3. Based on existing capacity resources, adjusted for currently planned additions or retirements, both APCo and Mon Power face declining excess reserve margins, with Mon Power having negative excess reserve margins over the entire forecast period.
4. As discussed earlier in this report, the need to acquire new supply to assure reliability is not triggered until the excess reserve margins reach zero.
5. Since APCo has elected an exclusive self-supply option under PJM rules, it should meet UCAP load obligations and maintain a small but declining excess reserve margin with company-owned capacity and purchased power contracts, except for one year in the forecast period.
6. Mon Power faces reserve margins that are below zero throughout the forecast period, which means it must acquire additional capacity or control load to meet its supply obligations to cover its PJM UCAP load.
7. Unlike APCo, which has elected an exclusive self-supply option, Mon Power has elected to have the ability to meet shortfalls in UCAP either through acquiring additional supply resources or purchasing capacity from the PJM Capacity Market.

Appalachian Power Company and Wheeling Power Company

Of the operating companies that comprise the AEP East System, APCo is the largest in terms of population served, number of customers and area of service territory. The APCo service territory covers southern West Virginia and adjacent portions of Virginia. WPCo owns generation facilities as well as transmission and distribution facilities providing service in Marshall and Ohio counties in the Northern Panhandle of West Virginia. For rate regulation purposes in West Virginia, all operating costs of APCo and WPCo, including power supply costs, are combined and shared among APCo and WPCo customers. The Commission sets the same tariff rates, by class of customer, for both companies.

APCo's current internal electricity supply sources include coal-fired steam power plants, natural gas-fired power plants employing either solely combustion turbine technology or combined combustion turbine and steam technology (combined cycle), hydroelectric facilities and purchased power contracts. APCo also has existing purchased power contracts from

renewable resources, and potential future additions include additional capacity and energy supplies from renewable energy sources.

APCo has historically reached its annual peak demands during the winter months. Historically, the Commission has projected the APCo supply and demand balances at the time of the annual winter peaks. Because PJM peaks in the summer, for PJM planning purposes the adequacy of APCo self-supply capacity to meet UCAP load obligations is measured during the summer months and the supply and demand data used in this report reflect summer peaks. Thus, it is possible that APCo's projected excess reserve margins in any year will be less, and likely even negative, when APCo reaches its winter internal peaks. Because of the availability of capacity and energy from the PJM market after meeting its summer self-supply obligations, any additional capacity and energy required during APCo's winter peak periods should be available from the PJM market.

A summary of the combined projected capacity supply and demand (at PJM UCAP levels) for APCo and WPCo is represented in the following table.

Appalachian Power Company / Wheeling Power Company Projected Supply and Demand – 2021 through 2030 Based on Summer Internal Demand Plus PJM Reserve Requirements and UCAP Supply ¹								
	Internal Demand Plus Reserve Margins			UCAP Supply			Excess Reserve Margin Over Reserves Already Built Into UCAP	
	APCo	WPCo	APCo/ WPCo	APCo	WPCo	APCo/ WPCo	APCo/WPCo	
Year	MW	MW	MW	MW	MW	MW	MW	Percent
2021	6,119	716	6,835	6,325	684	7,009	174	2.55%
2022	6,121	719	6,840	6,325	684	7,009	169	2.47%
2023	6,098	699	6,797	6,328	712	7,040	243	3.57%
2024	6,084	721	6,805	6,382	712	7,094	289	4.25%
2025	6,067	725	6,792	5,956	712	6,668	-124	-1.83%
2026	5,911	729	6,640	5,956	712	6,668	28	0.43%
2027	5,851	712	6,562	5,951	712	6,663	100	1.53%
2028	5,858	714	6,572	5,938	712	6,650	77	1.18%
2029	5,819	719	6,538	5,924	712	6,636	97	1.49%
2030	5,817	722	6,538	5,893	712	6,605	67	1.02%

1. Supply data include APCo total company (WV and VA) and WPCo current UCAP capacity resources, plus or minus any currently planned additions or retirements. Demand data reflects projected UCAP demands, which are adjusted to include PJM reserve requirements.

Monongahela Power and Potomac Edison Power Company West Virginia

Mon Power and PE are regulated subsidiaries of FirstEnergy. The long-term assessment of supply and demand includes the total current and future capacity resources owned or contracted by Mon Power and the total load (demand) for the combined Mon Power and PE service territory in West Virginia.

Mon Power's current internal electricity supply sources include coal-fired steam plants and purchased power contracts. The purchased power contracts include coal- and gas-fired generation and both run-of-river and pump storage hydro generation. Potential future changes in the Mon Power supply sources include acquisition of additional generating capacity and additional purchases from the PJM market.

Like APCo, Mon Power has historically reached its annual peak demands during the winter months. Because PJM peaks in the summer, for PJM planning purposes the adequacy of Mon Power capacity is measured during the summer months. Although on a stand-alone basis it would be normal to project the Mon Power supply and demand balances at the time of the annual winter peaks, for purposes of this report the Commission is using the summer demand levels that are used for PJM planning purposes. Excess reserve margins will be lower in the winter when Mon Power reaches its internal peaks. It is likely that projected excess reserve margins will be less or projected negative at the time of Mon Power's winter peak demand. Because it has not elected an exclusive self-supply option, if Mon Power requires more capacity at any time, that capacity should be available from the PJM market.

A summary of the Mon Power/PE projected capacity supply and demand for the forecast period is reflected in the following chart. The Mon Power data reflects a supply deficiency throughout the forecast period.

Unlike APCo, Mon Power can use purchases from the PJM capacity market to meet incremental capacity deficiencies. For resource planning, Mon Power will have to consider either continuing to rely on the PJM market to meet its total UCAP load obligations or adding new company-owned or contracted capacity.

Monongahela Power Company and Potomac Edison West Virginia Operations Projected Supply and Demand – 2021 through 2030 Based on Summer Internal Peak Demand Plus PJM Reserve Requirements and UCAP Supply ¹								
	Internal Demand Plus Reserve Margins			UCAP Supply			Excess Reserve Margin Over Reserves Already Built Into UCAP	
	Mon Power	PE	Mon Power/PE	Mon Power	PE	Mon Power/PE	Mon Power/PE	
Year	MW	MW	MW	MW	MW	MW	MW	Percent
2021	2,467	778	3,245	3,093	0	3,093	-152	-4.68%
2022	2,545	788	3,333	3,166	0	3,166	-167	-5.01%
2023	2,628	796	3,424	3,166	0	3,166	-258	-7.54%
2024	2,668	801	3,469	3,166	0	3,166	-303	-8.73%
2025	2,681	804	3,485	3,166	0	3,166	-319	-9.15%
2026	2,699	807	3,506	3,166	0	3,166	-340	-9.70%
2027	2,715	808	3,523	3,166	0	3,166	-357	-10.13%
2028	2,725	810	3,535	3,166	0	3,166	-369	-10.44%
2029	2,734	811	3,545	3,166	0	3,166	-379	-10.69%
2030	2,738	812	3,550	3,166	0	3,166	-384	-10.82%

1. Supply data include Mon Power current UCAP capacity resources (including 73 MW for the Grant Town PURPA contract from 2022 through 2030). Demand data reflects projected Mon Power and PE/WV UCAP demands, which are adjusted to include PJM reserve requirements.

PJM Interconnection LLC

PJM is a regional transmission organization that operates the transmission grid delivering power in all or parts of Illinois, Michigan, Indiana, Ohio, Kentucky, Tennessee, North Carolina, Virginia, West Virginia, Maryland, the District of Columbia, Pennsylvania, Delaware and New Jersey. The PJM grid is made up of the major transmission facilities owned by a large number of integrated electric utilities, transmission companies spun off from former integrated electric utilities and new transmission companies. These transmission owners have turned over the operation of their interconnected transmission lines to PJM.

As the grid operator, PJM conducts ongoing long-term regional planning that projects load within the system. Based on overall load levels, the geographic location of loads and the capability of the transmission lines to move energy within the grid, PJM evaluates potential grid transmission bottlenecks and reliability issues. The end result of the evaluation and planning process is the identification of transmission upgrades and new transmission necessary to ensure reliably delivered power. PJM notifies the transmission owners of the need for system upgrades. For local, lower voltage upgrades, transmission owners are then responsible for implementing the necessary upgrades. Under FERC rules, larger upgrades needed for reliability purposes and subject to PJM-wide cost allocation may be subject to competitive bidding.

PJM operates a competitive wholesale electricity energy market within the region served by the transmission facilities under its control. Generation providers can bid their production volumes and prices for delivery into the market on the next day. Those energy bids are matched to the energy requirements of load-serving entities on the next day (day-ahead market). PJM matches generation and load requirements on a regional basis and determines the hourly prices at which power will enter (clear) the market. The market price for power can vary based on location and time of day. In addition, PJM manages a real-time power market to price power necessary to serve hourly supply and demand fluctuations from the day-ahead market commitments.

PJM also operates a capacity market. The capacity market is based on the PJM long-term Reliability Pricing Model (RPM). Along with capacity buyers and sellers, the RPM takes into consideration the continued use of self-supply and bilateral contracts by load-serving entities electing to generate or contract for their own capacity requirements. Annual capacity auctions obtain the remaining capacity that is needed after Fixed Resource or Self Supply market participants have committed the resources they will supply themselves or obtain through contracts. PJM receives bids for annual capacity from suppliers to be available three years in the future. Through this bidding process, the price that will be paid for that future capacity is established based on the price of the last unit of capacity that clears the market. All successful bidders receive the marginal market clearing price, and all load pays that price.

FERC recently determined that the PJM Capacity Market bidding rules were unjust and unreasonable (June 29, 2018 FERC Order in Docket Nos. EL16-49-000, ER18-1314-000, ER18-1314-001 and EL18-178-000, Consolidated). To address its perceived deficiencies in the PJM Capacity Market, FERC initiated a hearing process seeking input on its preliminary findings that PJM should expand the Minimum Offer Price Rule to cover all capacity resources, existing and planned, receiving out-of-market support (subsidies); and implement a new, resource-specific construct that allows subsidized resources to remain on the system but outside the capacity market. Due to the FERC delay in approving new “just and reasonable” capacity market rules, the 2019 and 2020 capacity auction that would have locked-in capacity volumes and prices for 2023/2024 and 2024/2025 did not take place as scheduled.

FERC reconsidered and modified its decision in 2020, and FERC ruled on a PJM proposal to implement the Final FERC Order in 2020. The new PJM tariff rules regarding capacity bidding have been appealed in Federal Court, but the delayed capacity auctions are expected to resume in mid-2021.

Conclusion

Based on the information provided to and reviewed by the Commission Staff, it is the conclusion of the Commission that West Virginia will have an adequate supply of electricity available to meet demand for the next 10 years (2021-2030). Any shortfall in supply that is not filled by purchased capacity or utility-owned generation will be met through purchases from the PJM capacity market.

APPENDIX H

Natural Gas Utilities Supply – Demand Forecast 2021-2030

This report presents information about the current natural gas supply and demand conditions in West Virginia and the future natural gas supply and demand over the next 10 years.

The *Natural Gas Utilities Supply-Demand Forecast 2021-2030* is similar to previous reports to the Legislature, primarily because: (i) the actual flowing supplies match all demand in the state at all times (except for minimal unplanned outages); (ii) the capacity of unrestrained production far exceeds the current and future projected demand; (iii) shale gas development is still occurring; and (iv) there have been no significant identified additions to current or projected demands on utility systems in the state or power production fuel switching involving natural gas public utilities. Therefore, the only changes made are to update the forecast date range, comment on the likely effects of SB 390 and update market price forecasts.

Prior to 1979, the wholesale price of natural gas was regulated and capped by the Federal government. There was some concern at that time that suppliers of natural gas were reluctant to produce and market their supplies and that exploration for new supplies was somewhat curtailed because some believed wholesale gas prices were artificially low and unprofitable. The Legislature, concerned about these factors and interested in learning more about the natural gas production industry in West Virginia and what role the Legislature might play in it, directed the Commission as part of an annual *Management Summary Report*, to describe in a concise manner the current balance of supply and demand for natural gas and electric utility services in the state and forecast the probable balance for the next 10 years.

Prior to the passage of the Federal Natural Gas Policy Act of 1978 (NGPA), the natural gas market was experiencing production shortages that many believed were a direct result of Federal price controls. The NGPA addressed the situation by establishing a schedule of price decontrol over time, reducing barriers between interstate and intrastate markets and providing incentives for gas exploration and development. Today, wholesale natural gas prices are market driven and are subject to various market forces, much like the prices of any other publicly-traded commodity.

West Virginia, as a major gas producing state, exports far more native production gas than it consumes. The state also has multiple access points to interstate gas from other production areas and major gas storage areas. This report focuses on the physical availability of supplies of natural gas and the outlook for the next 10 years. Based on recent developments of unconventional natural gas reserves in the Appalachian Basin and elsewhere in the United States, there is more than an ample supply for the coming decade and beyond. Included again in this year's report are some concerns regarding peripheral issues related to general supply and demand and some more localized concerns relating to certain trends.

Natural gas public utilities buy gas based primarily on a national market price basis and recover those costs through rates that contain additional storage and transportation costs and adjustments due to past period over- or under-recoveries of gas costs.

History of Natural Gas Pricing

Prior to the passage of the NGPA and for the first few years afterward, natural gas prices at the wellhead were regulated with a maximum allowable price. As production costs escalated with inflation, the producers saw their profits decrease to the point that it was no longer attractive to investors and owners to drill new wells or, in some situations, to continue to maintain wells that had already been put into production, therefore increasing Legislative interest in shut-in wells.

The situation became so severe that there were moratoria put into place restricting the addition of new distribution customers, essentially nationwide. This resulted in an increase of all-electric housing and businesses.

Congress passed the Industrial Fuel Use Act of 1978, which dictated the allowable uses of natural gas by industry. The use of natural gas in industrial boilers, including for the generation of electricity, was not allowed. This led to conversion of natural gas-fired boilers to fuel oil and reduced natural gas use in industrial boilers.

Congress then passed the Natural Gas Utilization Act of 1987, which repealed much of the Fuel Use Act at about the same time wellhead prices became fully deregulated under the NGPA, and the commodity began trading on a national commodity market basis. Both supply and demand, as well as prices, rose significantly. These actions greatly reduced concerns over adequate supplies in the near term.

Since 2007, huge new supplies of gas have become available and recoverable due to advances in deep well and horizontal drilling technology and economic feasibility, along with the accompanying hydraulic fracturing process. Estimates by industry, government and academia show there is more than ample supply for the long term, with most saying there is a recoverable supply in North America to cover needs for 100 years or more. The abundance has driven the price of natural gas to near record low levels as compared to prices in the 1980s and 1990s. There continues to be a growing increase in the use of gas for electric generation and other industrial applications and the exporting of liquefied natural gas to other countries has begun.

Marcellus Shale Impact on Supply

The feasibility of extracting natural gas from the Marcellus Shale formation in the Appalachian Region has resulted in increased drilling and production activity in West

Virginia over the past 14 years. Gas has long been known to exist in the formation, but until improvements in deep well and horizontal drilling capabilities were made, the resource was not attractive to producers and consumers. Since 2006, the supply has grown to such an extent that wellhead prices have dropped to a level where new drilling is slowing.

Recently, new drilling activities have shifted to oil-bearing areas in the eastern United States formations, most notably the Utica Shale that is predominately in Ohio, and to “wet” gas zones in the Marcellus formation. This shift in production activities may slow, but will not eliminate, production of natural gas from other non-traditional formations. As producers develop oil-bearing formations, gas that coexists with the oil must also be produced.

Because demand has significantly lagged behind the increases in supply, there is currently activity aimed at preparing to export more liquefied natural gas from the United States to foreign markets. There is also increased activity to encourage the use of compressed natural gas as vehicular fuel. Because of the low prices and environmental regulatory actions regarding air quality, natural gas use for electric generation is increasing dramatically, including in West Virginia, Ohio and Pennsylvania.

The U.S. Energy Information Administration (EIA) Short Term Energy Outlook, released in November 2020, provides the following information:

- In October, the Henry Hub natural gas spot price averaged \$2.39 per million British thermal units (MMBtu), up from an average of \$1.92/MMBtu in September. Higher natural gas spot prices reflected stronger demand for liquefied natural gas (LNG) exports as LNG terminals increased liquefaction following hurricane-related disruptions in August and September. EIA expects Henry Hub spot prices to rise to a monthly average of \$3.42/MMBtu in January 2021 because of rising domestic demand for natural gas for space heating, rising U.S. LNG exports, and reduced production. EIA expects that monthly average spot prices will remain higher than \$3.00/MMBtu throughout 2021, averaging \$3.14/MMBtu for the year, up from a forecast average of \$2.14/MMBtu in 2020.
- EIA estimates that total U.S. working natural gas in storage ended October at almost 4.0 trillion cubic feet (Tcf), 5% more than the five-year (2015-2019) average and the second highest end-of-October level on record. However, because EIA forecasts less U.S. natural gas production this winter than last winter, EIA forecasts that inventory draws will outpace the five-year average during the heating season (October–March) and end March 2021 at 1.5 Tcf, which would be 16% lower than the 2016-2020 average.
- EIA expects that total U.S. consumption of natural gas will average 83.7 billion cubic feet per day (Bcf/d) in 2020, down 1.7% from 2019. The decline in total U.S. consumption reflects less heating demand in early 2020, contributing to residential demand in 2020 averaging 13.2 Bcf/d (down 0.6 Bcf/d from 2019) and commercial demand in 2020 averaging 8.8 Bcf/d (down 0.9 Bcf/d from 2019). EIA forecasts industrial consumption

will average 22.5 Bcf/d in 2020, down 0.6 Bcf/d from 2019 as a result of reduced manufacturing activity. EIA expects total U.S. natural gas consumption will average 79.4 Bcf/d in 2021, a 5.2% decline from 2020. The expected decline in 2021 is the result of rising natural gas prices that will reduce demand for natural gas in the electric power sector.

- EIA forecasts U.S. dry natural gas production will average 91.0 Bcf/d in 2020, down from an average of 93.1 Bcf/d in 2019. In the forecast, monthly average production falls from a record 97.0 Bcf/d in December 2019 to 87.0 Bcf/d in April 2021 before increasing slightly. EIA forecasts dry natural gas production in the United States to average 87.9 Bcf/d in 2021. EIA expects production to begin rising in the second quarter of 2021 in response to higher natural gas and crude oil prices. The increase in crude oil prices is expected to raise associated gas production from oil-directed wells in late-2021, especially in the Permian region.
- EIA estimates that the United States exported 7.2 Bcf/d of LNG in October, an increase of 2.3 Bcf/d from September—the largest month-on-month increase since U.S. LNG exports began in 2016. Cameron LNG resumed LNG exports in October after being shut down following Hurricane Laura and Hurricane Delta. Cove Point LNG completed its scheduled three-week annual maintenance and resumed LNG exports in mid-October. Higher global forward prices for LNG indicate improving netbacks for buyers of U.S. LNG in European and Asian markets for the upcoming winter season. The increased prices come amid expectations of natural gas demand recovery in those markets and potential LNG supply reductions because of outages at several LNG export facilities in the Pacific Basin and Atlantic Basin. EIA forecasts that U.S. LNG exports will be above pre-COVID levels in November 2020, averaging 8.5 Bcf/d, and will average 8.4 Bcf/d in 2021, a 31% increase from 2020.

Natural Gas Utility Positions

We expect little change in natural gas utility load over what was reported last year. The passage of SB 390, designed to encourage the expansion of the gas industry and the availability of natural gas to unserved or underserved areas of the state, will almost certainly lead to expansion of gas utility infrastructure. At this point, however, it is difficult to estimate what additional load volumes these activities might produce. It is noted that certain areas of the state may experience declines in gas demand due to shrinking populations and certain industrial declines.

Conclusion

West Virginia and the United States have more than enough natural gas available to meet demand for the next 10 years (2021-2030) and well beyond. This gas will likely be available in the near term at continuing commodity price levels near or even below \$3.00/MMBtu plus transport and storage fees. The state's natural gas utilities will have ample supplies for their systems and relatively flat demand for the coming decade.

APPENDIX I

Utility Discount Program

Through a program created by the West Virginia Legislature in 1983, certain qualifying residential customers are eligible for a special reduced rate schedule in their gas, electric and water utility rates. The special reduced rate is 20% less than the rate applicable to other residential customers obtaining similar service.

Eligible customers must be receiving:

- Social Security Supplemental Security Income (SSI);
- WV Works, program previously called Aid to Families with Dependent Children (AFDC) and Temporary Aid to Needy Families (TANF); or
- Supplemental Nutrition Assistance Program (SNAP), program previously called Food Stamps, if the recipient is age 60 or older.

During the 2019-2020 program year, 36,672 electric customers received more than \$4.63 million in discounts, 13,349 natural gas customers received more than \$1.04 million in discounts and 6,334 eligible West Virginia American Water customers received \$825,621 in discounts.

Following is a report on the 20% discount program for the billing months of November 2019 through April 2020 for the gas and electric utilities and for the billing months of June 2019 through May 2020 for WVAV. A summary by type of utility, including the percentage changes from last year and individual utility information is detailed on the following pages.

20% Discount Program for Electric Utilities

	Appalachian Power	Black Diamond Power	Monongahela Power	Potomac Edison	Wheeling Power
Applications Received	19,535	1,115	14,257	3,557	1,184
Applications Approved	18,004	1,115	13,188	3,251	1,114
Percent Approved	92.16%	100.00%	92.50%	91.40%	94.09%
Residential Customers	353,015	3,466	332,786	124,233	34,882
Customers Given Discount	18,004	1,115	13,188	3,251	1,114
Percent Given Discount	5.10%	32.17%	3.96%	2.62%	3.19%
SSI Customers	9,940	713	6,587	1,221	485
WV Works Customers	1,210	86	670	194	57
SNAP (Age 60 Plus)	6,854	316	5,931	1,836	572
Bills at Non-Discounted Rates	\$13,688,891.25	\$147,142.66	\$6,546,433.08	\$2,206,546.04	\$602,465.05
Bills at Discounted Rates	\$10,951,113.00	\$118,735.33	\$5,237,154.03	\$1,767,636.57	\$481,972.04
Revenue Decrease	\$2,737,778.25	\$28,407.33	\$1,309,289.05	\$441,909.47	\$120,493.01
Adjustment for B&O Tax Reduction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue Deficiency Certified	\$2,737,778.25	\$28,407.33	\$1,309,289.05	\$441,909.47	\$120,493.01

Data for November 2019 - April 2020

20% Discount Program for Natural Gas Utilities

	Consumers Gas Utility	Dominion Energy WV (Hope Gas)	Megan Oil & Gas	Mountaineer Gas
Applications Received	438	4,972	25	7,291
Applications Approved	437	4,906	25	7,291
Percent Approved	99.77%	98.67%	100.00%	100.00%
Residential Customers	7,607	102,049	296	194,146
Customers Given Discount	437	4,906	25	7,291
Percent Given Discount	5.74%	4.81%	8.45%	3.76%
SSI Customers	237	2,365	14	3,510
WV Works Customers	17	307	0	556
SNAP (Age 60 Plus)	183	2,234	11	3,225
Bills at Non-Discounted Rates	\$182,819.69	\$1,574,042.50	\$14,521.42	\$3,369,123.90
Bills at Discounted Rates	\$144,743.62	\$1,259,234.00	\$11,617.14	\$2,695,299.12
Revenue Decrease	\$38,076.07	\$314,808.50	\$2,904.28	\$673,824.78
Adjustment for B&O Tax Reduction	\$1,633.46	\$13,505.29	\$124.59	\$28,907.08
Revenue Deficiency Certified	\$36,442.61	\$301,303.21	\$2,779.69	\$644,917.70
Data for November 2019 - April 2020				

20% Discount Program for Natural Gas Utilities

	People's Gas WV	Southern Public Service Co.	Standard Gas	Union Oil & Gas
Applications Received	373	243	9	78
Applications Approved	363	243	9	75
Percent Approved	97.32%	100.00%	100.00%	96.15%
Residential Customers	11,735	5,454	342	5,841
Customers Given Discount	363	243	9	75
Percent Given Discount	3.09%	4.46%	2.63%	1.28%
SSI Customers	173	133	5	35
WV Works Customers	21	21	1	33
SNAP (Age 60 Plus)	169	89	3	7
Bills at Non-Discounted Rates	\$174,087.60	\$99,896.96	\$2,938.13	\$28,844.55
Bills at Discounted Rates	\$139,270.08	\$80,535.64	\$2,350.43	\$23,075.64
Revenue Decrease	\$34,817.52	\$19,361.32	\$587.70	\$5,768.91
Adjustment for B&O Tax Reduction	\$1,493.67	\$830.60	\$25.21	\$247.49
Revenue Deficiency Certified	\$33,323.85	\$18,530.72	\$562.49	\$5,521.42
Data for November 2019 - April 2020				

20% Discount Program Summary Data

	Electric Utilities			Natural Gas Utilities			West Virginia American Water		
	2019-2020	2018-2019	Change	2019-2020	2018-2019	Change	2019-2020	2018-2019	Change
Applications Received	39,648	39,201	1.14%	13,429	13,611	-1.34%	1,226	1,255	-2.31%
Applications Approved	36,672	35,958	1.99%	13,349	13,492	-1.06%	936	936	0.00%
Percent Approved	92.49%	91.73%		99.40%	99.13%		76.35%	74.58%	
Residential Customers	848,382	849,725	-0.16%	327,470	364,882	-10.25%	166,760	166,760	0.00%
Customers Given Discount	36,672	35,958	1.99%	13,349	13,492	-1.06%	6,334	5,974	6.03%
Percent Given Discount	4.32%	4.23%		4.08%	3.70%		3.80%	3.58%	
SSI Customers	18,946	19,072	0.66%	6,472	6,799	-4.81%	205	284	-27.82%
WV Works Customers	2,217	2,190	1.23%	956	929	2.91%	616	456	35.09%
SNAP (Age 60 Plus)	15,509	14,696	5.53%	5,921	5,764	2.72%	115	196	-41.33%
Bills at Non-Discounted Rates	\$23,191,478.08	\$23,497,815.31		\$5,446,274.75	\$5,849,371.66		\$4,286,860.00	\$3,196,530.00	
Bills at Discounted Rates	\$18,556,610.97	\$18,798,254.26		\$4,356,125.67	\$4,677,732.61		\$3,423,239.00	\$2,557,487.00	
Revenue Decrease	\$4,637,877.11	\$4,699,561.05	-1.31%	1,090,149.08	\$1,171,639.05	-6.96%	\$863,621.00	\$639,043.00	35.14%
Adjustment for B&O Tax Reduction	\$0.00	\$0.00		\$46,767.40	\$50,263.32		\$37,999.32	\$28,117.89	
Revenue Deficiency Certified	\$4,637,877.11	\$4,699,561.05	-1.31%	\$1,043,381.68	\$1,121,375.73	-6.96%	\$825,621.68	\$610,925.11	35.14%

Gas and electric utility data for November 2019 - April 2020
 West Virginia American Water data for June 2019 - May 2020

APPENDIX J

Tel-Assistance Service Telephone Rate Discount Program

Tel-Assistance Service provides reduced rates for qualified low-income residential customers of telephone utilities through a waiver of the monthly Federal Subscriber Line Charge. The option of Tel-Assistance Service remains part of the filed residential tariffs of all of the local exchange telephone utilities and is available to all eligible customers. Eligible customers must be receiving benefits from an income-related State or Federal program, including SSI, WV Works, Medicaid, Federal Public Housing Assistance, Low Income Home Energy Assistance Program (LIHEAP) or SNAP if the recipient is age 60 or older.

The telephone utilities may recover their certified revenue deficiency as a credit against the carrier's income tax. The agreements or tariffs filed with the Commission for approval in accordance with the Tel-Assistance Program may specify the methodology by which the eligible telecommunications carrier calculates its annual revenue deficiency. Subject to prior approval by the Commission, eligible telecommunications carriers may agree to freeze or cap the amount of the revenue deficiency at specific levels.

Frontier, West Virginia Inc. and Citizens Telecommunications Company of West Virginia, dba Frontier Communications of West Virginia, are the only companies that filed a Tel-Assistance report for certification of revenue deficiency for 2020.

Frontier requested the Commission certify \$66,384.89 as its revenue deficiency associated with the Tel-Assistance Program for the 2019 program year (Case No. 20-0268-T-P). Citizens requested the Commission certify \$19,603.80 as its revenue deficiency for the 2019 program year (Case No. 20-0270-T-P). The Commission approved these revenue deficiencies. These cases are now closed.

