

KPCO_R_KPSC_RH_2_6_ATTACHMENT1

Part 2 of 2



04:00 PM SEP 21 2021 EXEC SEC DIV

ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: acb@ramlaw.com

September 21, 2021

Via Electronic Filing

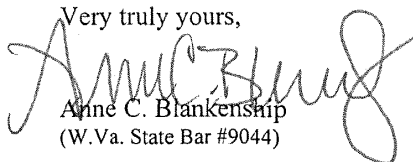
Connie Graley, Executive Secretary
Public Service Commission
of West Virginia
201 Brooks Street
Charleston, WV 25301

Re: Case No. 20-1040-E-CN
Appalachian Power Company and
Wheeling Power Company

Dear Ms. Graley:

Please find attached an **Agreed Order of Witnesses at Hearing for Petition to Reopen**.
Please file as appropriate in the above-referenced proceeding.

Very truly yours,



Anne C. Blankenship
(W.Va. State Bar #9044)

Counsel for
Appalachian Power Company and
Wheeling Power Company

ACB
Enclosures
cc: Service List

04:01 PM SEP 21 2021 EXEC SEC DIV

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

AGREED ORDER OF WITNESSES AT HEARING ON PETITION TO REOPEN

The parties have conferred and have agreed to present witnesses at the September 24,
2021 hearing in this matter in substantially the following order:

Appalachian Power Company and Wheeling Power Company

Gary O. Spitznogle
Randall R. Short

West Virginia Energy Users Group

Stephen J. Baron

WVCAG/SUN/EEWV

James F. Wilson

Staff

James C. Weimer

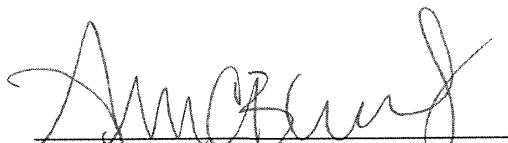
WVEUG witness Stephen Baron and WVCAG/SUN/EEWV witness James Wilson
intend to appear remotely. Mr. Wilson would appreciate being allowed to testify after 12:30
p.m. on September 24, 2021. The West Virginia Coal Association, the Consumer Advocate
Division, and the Sierra Club do not intend to present witnesses at the hearing. The Companies

wish to request the right to call Mr. Spitznogle and Mr. Short on rebuttal as the other parties did not pre-file written testimony on the Petition to Reopen.

Respectfully submitted,

**APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY**

By Counsel



William C. Porth (*WV State Bar #2943*)
Anne C. Blankenship (*WV State Bar #9044*)
Jonathon C. Stanley (*WV State Bar #13470*)
Robinson & McElwee PLLC
P. O. Box 1791
Charleston, West Virginia 25326

James R. Bacha
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215

Keith D. Fisher (*WV State Bar #11346*)
American Electric Power Service Corporation
Suite 800, Laidley Tower
500 Lee Street East
Charleston, West Virginia 25301

Counsel for Appalachian Power Company
and Wheeling Power Company

Dated: September 21, 2021

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 21st day of September 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, West Virginia 25301
Counsel for Consumer Advocate Division

Susan J. Riggs, Esquire
Jason C. Pizatella, Esquire
Spilman Thomas & Battle, PLLC
300 Kanawha Blvd., East
Charleston, WV 25301
Counsel for WVEUG

Derrick P. Williamson, Esquire
Barry A. Naum, Esquire
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
Counsel for WVEUG

Dorothy E. Jaffe, Esquire
The Sierra Club
50 F Northwest, Eight Floor
Washington, DC 20001
Counsel for The Sierra Club

J. Michael Becher, Esquire
Appalachian Mountain Advocates
PO Box 11571
Charleston, WV 25339
Counsel for The Sierra Club

Evan Dimond Johns, Esquire
Appalachian Mountain Advocates
PO Box 507
Lewisburg, WV 24901
Counsel for The Sierra Club

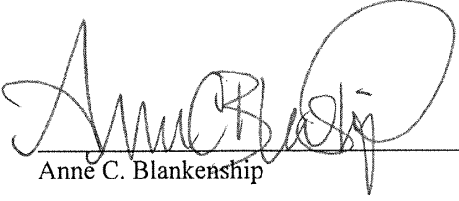
Emmett Pepper, Esquire
Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
Counsel for CAG/SUN/EEWV

Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General



Anne C. Blankenship



ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: acb@ramlaw.com

September 28, 2021

Via Electronic Filing

Connie Graley, Executive Secretary
Public Service Commission
of West Virginia
201 Brooks Street
Charleston, WV 25301

04:12 PM SEP 28 2021 EXEC SEC DIV

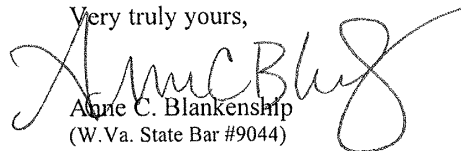
Re: Case No. 20-1040-E-CN
Appalachian Power Company and
Wheeling Power Company

Dear Ms. Graley:

Please find attached on behalf of Appalachian Power Company and Wheeling Power Company, **Commission Exhibit 1**, requested by the Commission during the September 24, 2021 hearing in the above-referenced case.

Please file with the Commission as appropriate. Thank you for your assistance in this matter.

Very truly yours,



Anne C. Blankenship
(W.Va. State Bar #9044)

Counsel for
Appalachian Power Company and
Wheeling Power Company

ACB
Enclosures
cc: Service List

04:12 PM SEP 28 2021 EXEC SEC DIV

Commission Exhibit 1
Case Number 20-1040-E-CN

	Employee Count
Amos	238
Mountaineer	161
Mitchell	186

> Through the end of Dec 2020. This represents only APCo or KPCo employees assigned to the plant department.

<i>(in millions)</i>	Wages	Property Tax	Gross B&O Taxes	Net B&O Taxes
Amos	\$ 35.5	\$ 5.7	\$ 25.8	\$ 19.3
Mountaineer	\$ 23.1	\$ 3.6	\$ 15.2	\$ 11.4
Mitchell	\$ 26.9	\$ 16.7	\$ 16.8	\$ 16.8

- > Wages include Straight-time Labor, Overtime, Incentives, Lump Sum Payments, and Fringes.
- > For Amos and Mountaineer, the WV B&O tax is paid at the entity level and as with the credits, is allocated between the plants based on the plant's percentage of the total APCO capacity.
- > State and Local Taxes are not assessed by power plant, except for property taxes.

Source: CAD 3-9

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 28th day of September 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, West Virginia 25301
Counsel for Consumer Advocate Division

Susan J. Riggs, Esquire
Jason C. Pizatella, Esquire
Spilman Thomas & Battle, PLLC
300 Kanawha Blvd., East
Charleston, WV 25301
Counsel for WVEUG

Derrick P. Williamson, Esquire
Barry A. Naum, Esquire
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
Counsel for WVEUG

Dorothy E. Jaffe, Esquire
The Sierra Club
50 F Northwest, Eight Floor
Washington, DC 20001
Counsel for The Sierra Club

J. Michael Becher, Esquire
Appalachian Mountain Advocates
PO Box 11571
Charleston, WV 25339
Counsel for The Sierra Club

Evan Dimond Johns, Esquire
Appalachian Mountain Advocates
PO Box 507
Lewisburg, WV 24901
Counsel for The Sierra Club

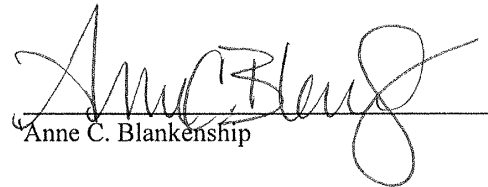
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Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
Counsel for CAG/SUN/EEWV

Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General


Anne C. Blankenship



ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: acb@ramlaw.com

October 1, 2021

Via Electronic Filing

Connie Graley, Executive Secretary
Public Service Commission of West Virginia
201 Brooks Street
Charleston, WV 25301

03:29 PM OCT 01 2021 EXEC SEC DIV

Re: Appalachian Power Company
and Wheeling Power Company
Case No. 20-1040-E-CN

Dear Ms. Graley:

On August 16th, 2021, Appalachian Power Company and Wheeling Power Company (collectively "the Companies") filed Tariff Sheets in the above-referenced case pursuant to the Order issued on August 4, 2021. The Companies have discovered errors in the Tariff Sheets and have corrected those, attached. Please file the revised Tariff Sheets in the above-referenced case as appropriate.

Thank you for your assistance in this matter.

Very truly yours,

Anne C. Blankenship
(W. Va. State Bar #9044)

Counsel for Appalachian Power Company and
Wheeling Power Company

Enclosure
cc: Service List

{R1618672.1}

03:29 PM OCT 01 2021 EXEC SEC DIV

APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
(See Sheet Nos. 2-1 through 2-7 for Applicability)

Second Revision of Original Sheet No. 5-1
Canceling First Revision of Original Sheet No. 5-1

P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)

SCHEDULE R.S.
(Residential Service)

AVAILABILITY OF SERVICE

Available for electric service through one meter to individual residential customers, including rural residential customers engaged principally in agricultural pursuits.

MONTHLY RATE (Schedule Codes 011, 015, 018, 038, 039, 051)

Basic Service Charge	\$12.50/month
Energy Charge:	
March through November:	
First 500 KWH	8.558¢/KWH
All Over 500 KWH	7.206¢/KWH
January, February & December:	
First 500 KWH	8.558¢/KWH
All Over 500, equal to or less than 1,350 KWH	7.206¢/KWH
All Over 1,350 KWH	4.144¢/KWH

(C) OTHER CHARGES/CREDITS

Service under this Schedule may be subject to the C.S. (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the Basic Service Charge.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt and payable by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company within twenty (20) days of the mailing date. Effective October 1, 2006, any current amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the next scheduled read date shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
P.S.C. West Virginia
Case No. 20-1040-E-CN
Order Dated August 4, 2021

Issued By
Christian T. Beam, President & COO
Charleston, West Virginia

Effective: Service rendered on or after
September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 7-1
 Canceling First Revision of Original Sheet No. 7-1**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE R.S.-T.O.D.
 (Residential Service Time-of-Day)**

AVAILABILITY OF SERVICE

Available for electric service to individual residential customers, including rural residential customers engaged principally in agricultural pursuits who wish to be metered through one single-phase multiple-register meter capable of measuring electrical energy consumption during the on-peak and off-peak billing periods.

MONTHLY RATE (Schedule Codes 030, 032)

Basic Service Charge	\$15.62/month
Energy Charge:	
All KWH during the on-peak billing period	13.668¢/KWH
All KWH during the off-peak billing period	2.798¢/KWH

For the purpose of this Schedule, the on-peak billing period is defined as 7 a.m. to 9 p.m., local time, for all weekdays, Monday through Friday. The off-peak billing period is defined as 9 p.m. to 7 a.m., local time, for all weekdays, all hours of the day on Saturdays and Sundays, and the legally observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

(C) OTHER CHARGES/CREDITS

Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the Basic Service Charge.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt and payable by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company within twenty (20) days of the mailing date. Effective October 1, 2006, any current amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the next scheduled read date shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

**APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY**
(See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 8-1
Canceling First Revision of Original Sheet No. 8-1**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE S.W.S.
(Sanctuary Worship Service)**

AVAILABILITY OF SERVICE

Available for service only to the building in which the sanctuary or principal place of worship is located.

MONTHLY RATE (Schedule Code 222)

Basic Service Charge \$ 15.00/month
Energy Charge:
First 7,000 KWH 7.240¢/KWH
All over 7,000 KWH 6.170¢/KWH

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the Basic Service Charge.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt and payable by the "Last Pay Date" shown on the bill. Any amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the next bill preparation date shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

TERM

Contracts may be required pursuant to the Extension of Service provision of the Company's Terms and Conditions of Service.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
P.S.C. West Virginia
Case No. 20-1040-E-CN
Order Dated August 4, 2021

Issued By
Christian T. Beam, President & COO
Charleston, West Virginia

Effective: Service rendered on or after
September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 9-1
 Canceling First Revision of Original Sheet No. 9-1**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE S.S.
 (School Service)**

AVAILABILITY OF SERVICE

Available for service to all primary and secondary school, college and university buildings and public libraries for which the entire electrical requirements are furnished by the Company.

MONTHLY RATE

Schedule Codes	Service Voltage	Demand Charge (\$/KW)	Energy Charge ¢/KWH	Basic Service Charge \$/Month
634, 636	Secondary	2.650	5.104	20.00
635	Primary	1.950	4.625	60.00

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

Customers with demands below 500 KW are subject to a minimum monthly charge equal to the Basic Service Charge. Customers with demands of 500 KW, or more are subject to a minimum monthly charge equal to the sum of the Customer Charge, the product of the Demand Charge and the monthly billing demand and all applicable adjustments.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt and payable by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company within twenty (20) days of the mailing date.

MEASUREMENT AND DETERMINATION OF DEMAND AND ENERGY

The billing demand in KW shall be taken monthly as the single highest 15-minute peak in KW as registered during the month by a demand meter or indicator. Where service is delivered through two meters to an existing customer, the monthly billing demand will be taken as the sum of the two demands separately determined and the billing KWH taken as the sum of the KWHs separately determined.

Monthly billing demands for customers with actual or contracted demands of 500 KW or more of capacity shall not be less than 60% of the greater of (a) the customer's contract capacity in excess of 100 KW, or (b) the customer's highest previously established monthly billing demand during the past 11 months in excess of 100 KW.

Billing demands will be rounded to the nearest whole KW.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
 P.S.C. West Virginia
 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY

Second Revision of Original Sheet No. 10-1
Canceling First Revision Original Sheet No. 10-1

(See Sheet Nos. 2-1 through 2-7 for Applicability)

P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)

SCHEDULE S.G.S.
(Small General Service)

AVAILABILITY OF SERVICE

Available for general service to customers with maximum electrical capacity requirements of 10 KW or less. When a customer being served under this Schedule establishes or exceeds a maximum requirement of 10 KW, the customer will be placed on the appropriate general service Schedule.

MONTHLY RATE (Schedule Codes 231, 234, 281)

Basic Service Charge \$ 15.00/month

Energy Charge 4.833¢/KWH

OTHER CHARGES/CREDITS

(C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the Basic Service Charge.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt. Any amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the "Last Pay Date" shown on the bill, shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

TERM

For customers eligible for this Schedule, a written agreement may be required at the option of the customer or the Company, pursuant to the Company's Terms and Conditions of Service.

A new initial contract period will not be required for existing customers who change their contract requirements after the original initial period unless new or additional facilities are required. The Company reserves the right to make initial contracts for periods of longer than one year pursuant to the Extension of Service provision of the Company's Terms and Conditions of Service.

The Company shall not be required to supply capacity in excess of that contracted for except by mutual agreement.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
P.S.C. West Virginia
Case No. 20-1040-E-CN
Order Dated August 4, 2021

Issued By
Christian T. Beam, President & COO
Charleston, West Virginia

Effective: Service rendered on or after
September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 11-1
 Canceling First Revision of Original Sheet No. 11-1**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE G.S.
 (General Service)**

AVAILABILITY OF SERVICE

Available for general service to customers with maximum demands exceeding 10 KW but less than 1,000 KW. When a customer being served under this Schedule establishes or exceeds a maximum requirement of 1,000 KW, the customer will be placed on the appropriate general service Schedule and required to contract for such capacity requirements.

MONTHLY RATE

Schedule Codes	Service Voltage	Demand Charge (\$/KW)	Off-Peak Excess Demand Charge (\$/KW)	First 350 KWH per KW Charge ¢/KWH	Over 350 KWH per KW Charge ¢/KWH	Basic Service Charge \$/Month
261	Secondary	10.55	3.370	2.534	0.866	35.00
263	Primary	8.63	1.700	2.431	0.830	100.00
265	Subtransmission	6.89	0.970	2.419	0.826	250.00
267	Transmission	6.76	0.920	2.374	0.811	350.00

Reactive Demand Charge for each KVAR of leading or lagging reactive demand in excess of 50% of the KW metered demand\$0.70/KVAR
 (Applicable to customers 300 KW or greater)

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S. (Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM AND MAXIMUM CHARGES

Bills computed under the above rate are subject to the operation of Minimum and Maximum Charge provisions as follows:

- (a) Minimum Charge - For demand accounts up to 100 KW - the Basic Service Charge.
 For demand accounts over 100 KW - the sum of the Basic Service Charge, the product of the Demand Charge and the monthly billing demand, and all applicable adjustments.
- (b) Maximum Charge - The sum of the Basic Service Charge, the product of 20¢/KWH and the metered energy, and all applicable adjustments. This provision shall not reduce the charge below the amount specified in the Minimum Charge provision above, (a).

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
 P.S.C. West Virginia
 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

Second Revision of Original Sheet No. 12-1
 Canceling First Revision of Original Sheet No. 12-1

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE G.S.-T.O.D.
 (General Service Time-of-Day)**

AVAILABILITY OF SERVICE

Available for general service to customers served at secondary or primary delivery voltage levels with maximum demands less than 150 KW. Customers taking service under Schedule G.S.T.O.D as of July 30, 2014 with maximum demands greater than 150 kW may continue taking service under Schedule G.S.T.O.D. Availability of service under this Schedule is restricted to the first 500 customers applying for service.

MONTHLY RATE

Schedule Codes	Service Voltage	On-Peak Energy Charge (¢/KWH)	Off-Peak Energy Charge (¢/KWH)	Basic Service Charge (\$/Month)
229	Secondary	8.591	2.955	35.00
227	Primary	7.767	2.360	100.00

For the purpose of this Schedule, the on-peak billing period is defined as 7 a.m. to 9 p.m., local time, for all weekdays, Monday through Friday. The off-peak billing period is defined as 9 p.m. to 7 a.m., local time, for all weekdays, all hours of the day on Saturdays and Sundays and the legally observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the Basic Service Charge.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt. Any amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the "Last Pay Date" shown on the bill shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
 P.S.C. West Virginia
 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 12A-1
 Canceling First Revision of Original Sheet No. 12A-1**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE L.G.S.-T.O.D.
 (Large General Service Time-of-Day)**

AVAILABILITY OF SERVICE

Available for general service to customers served at secondary or primary delivery voltage levels with maximum demands greater than 150 KW but less than 1,000 KW. Availability of service under this Schedule is restricted to the first 500 customers applying for service.

MONTHLY RATE

Schedule Codes	Service Voltage	On-Peak Demand Charge (\$/kW)	On-Peak Energy Charge (¢/KWH)	Off-Peak Energy Charge (¢/KWH)	Customer Charge (\$/Month)
339	Secondary	6,290	5.482	2.000	35.00
337	Primary	4,470	5.261	1.919	100.00

MEASUREMENT AND DETERMINATION OF DEMAND AND ENERGY

The billing demand in KW shall be taken each month as the single highest 15-minute peak in KW as registered during the month by a demand meter or indicator. Where service is delivered through two meters to an existing customer, the monthly billing demand will be taken as the sum of the two demands separately determined and the billing KWH taken as the sum of the KWHs separately determined.

Monthly billing demands for customers with actual or contracted demands of 100 KW or more of capacity shall not be less than 60% of the greater of (a) the customer's contract capacity in excess of 100 KW, or (b) the customer's highest previously established monthly billing demand during the past 11 months in excess of 100 KW.

If more than 50% of the customer's connected load is for electric space heating purposes, the minimum monthly billing demand for the billing months of May through October will be 25% of the greater of (a) the customer's contract capacity in excess of 100 KW, or (b) the customer's highest previously established monthly billing demand during the past 11 months in excess of 100 KW.

Billing demands shall be rounded to the nearest whole KW.

For the purpose of this Schedule, the on-peak billing period is defined as 7 a.m. to 9 p.m., local time, for all weekdays, Monday through Friday. The off-peak billing period is defined as 9 p.m. to 7 a.m., local time, for all weekdays, all hours of the day on Saturdays and Sundays and the legally observed holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
 P.S.C. West Virginia
 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

Second Revision of Original Sheet No. 14-1
 Canceling First Revision of Original Sheet No. 14-1

P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)

(SCHEDULE L.C.P.)
(Large Capacity Power Service)

AVAILABILITY OF SERVICE

Available for general service to customers. Customers shall contract for a definite amount of electrical capacity in kilowatts, which shall be sufficient to meet maximum requirements, but in no case shall the contract capacity be less than 1,000 kW.

MONTHLY RATE

Schedule Codes	Service Voltage	Demand Charge (\$/KW)	Off-Peak Excess Demand Charge (\$/KW)	Energy Charge (¢/KWH)	Customer Charge (\$/Month)
386	Secondary	16.550	3.470	0.738	85.00
387	Primary	14.760	1.960	0.718	275.00
388	Subtransmission	12.196	1.59	0.713	375.00
389	Transmission	11.692	1.52	0.700	475.00

Reactive Demand Charge for each KVAR of leading or lagging
 reactive demand in excess of 50% of the KW metered demand \$0.70/KVAR

OTHER CHARGES/CREDITS

(C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the sum of the Customer Charge, the product of the Demand Charge and the monthly billing demand, and all applicable adjustments.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt. Any amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents, of the Company by the "Last Pay Date" shown on the bill shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to P.S.C. West Virginia Case No. 20-1040-E-CN Order Dated August 4, 2021	Issued By Christian T. Beam, President & COO Charleston, West Virginia	Effective: Service rendered on or after September 1, 2021
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APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

Second Revision of Original Sheet No. 15-1
 Canceling First Revision of Original Sheet No. 15-1

P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)

SCHEDULE I.P.
(Industrial Power Service)

AVAILABILITY OF SERVICE

Available for general service to customers. Customers shall contract for a definite amount of electrical capacity in kilowatts, which shall be sufficient to meet maximum requirements, but in no case shall the contract capacity be less than 1,000 KW.

MONTHLY RATE

Schedule Codes	Service Voltage	Demand Charge (\$/KW)	Off-Peak Excess Demand Charge (\$/KW)	Energy Charge (¢/KWH)	Customer Charge (\$/Month)
327	Secondary	20.01	4.32	0.336	85.00
322	Primary	17.849	2.44	0.327	275.00
323	Subtransmission	15.066	1.82	0.325	375.00
324	Transmission	14.432	1.68	0.319	475.00

Reactive Demand Charge for each KVAR of leading or lagging
 reactive demand in excess of 50% of the KW metered demand \$0.70/KVAR

OTHER CHARGES/CREDITS

(C) Service under this Schedule may be subject to the C.S. (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MINIMUM CHARGE

This Schedule is subject to a minimum monthly charge equal to the sum of the Customer Charge, the product of the Demand Charge and the monthly billing demand, and all applicable adjustments.

LOCAL TAX ADJUSTMENT

To bills for electric service supplied within specified municipalities or political subdivisions which impose taxes based upon the amount of electric service sold or revenues received by the Company, as specified on Original Sheet No. 4-1, will be added a surcharge equal to the percentage shown on Sheet Nos. 4-2, 4-3, and 4-4 to accomplish a recovery of these taxes.

PAYMENT

Bills are due upon receipt. Any amount due and not received by mail, checkless payment plan, electronic payment plan, or at authorized payment agents of the Company by the "Last Pay Date" shown on the bill shall be subject to a delayed payment charge of 1%. This charge shall not be applicable to local consumer utility taxes.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to P.S.C. West Virginia Case No. 20-1040-E-CN Order Dated August 4, 2021	Issued By Christian T. Beam, President & COO Charleston, West Virginia	Effective: Service rendered on or after September 1, 2021
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APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

Second Revision of Original Sheet No. 17-2
Canceling First Revision of Original Sheet No. 17-2

P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)

SCHEDULE O.L.
(Outdoor Lighting)
 (continued)

Schedule Code	Wattage	Approx Lumen	Type of Lamp	Rate Per Lamp Per Month
153	57	5,200	Light Emitting Diode (Dusk to Dawn)	7.51
155	150	18,800	Light Emitting Diode Floodlight (Yoke)	13.26
156	150	18,800	Light Emitting Diode Floodlight	15.18
157	297	37,800	Light Emitting Diode Floodlight	19.61
160	41	4,800	Light Emitting Diode Roadway	8.84
161	139	14,000	Light Emitting Diode Roadway	11.40
162	219	23,000	Light Emitting Diode Roadway	14.48

MONTHLY RATE (Cont.)

- ① Effective November 2, 1991, this lamp is no longer available for new installations or for repair or replacement of existing units.
- ② Effective July 28, 2006, this lamp is no longer available for new installations or for repair or replacement of existing lights.
- ③ Effective March 1, 2007, this lamp is no longer available for new installations or for repair or replacement of existing lights.
- ④ Effective July 30, 2014, this lamp is no longer available for new installations or for repair or replacement of existing lights.
- ⑤ This lamp is no longer available for new installations or for repair or replacement of existing lights.

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1), the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

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 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

**APPALACHIAN POWER COMPANY
 WHEELING POWER COMPANY**
 (See Sheet Nos. 2-1 through 2-7 for Applicability)

**Second Revision of Original Sheet No. 18-3
 Canceling First Revision of Original Sheet No. 18-3**

**P.S.C. W.VA. TARIFF NO. 15 (APPALACHIAN POWER COMPANY)
 P.S.C. W.VA. TARIFF NO. 20 (WHEELING POWER COMPANY)**

**SCHEDULE S.L.
 (Street Lighting)
 (continued)**

C. Energy and Minor Maintenance

	<u>Wattage</u>	<u>Approx. Lumen</u>	<u>Type of Lamp</u>	<u>Rate Per Lamp Per Month (\$)</u>
Mercury Vapor:				
	175	7,000 lumens	Mercury Vapor	\$1.39
	400	21,000 lumens	Mercury Vapor	\$0.24
High Pressure Sodium:				
	100	9,500 lumens	High Pressure Sodium	\$2.33
	150	16,000 lumens	High Pressure Sodium	\$1.47
	200	22,000 lumens	High Pressure Sodium	\$0.55
	250	27,000 lumens	High Pressure Sodium	\$0.40
	400	50,000 lumens	High Pressure Sodium	\$0.26

OTHER CHARGES/CREDITS

- (C) Service under this Schedule may be subject to the C.S (Original Sheet No. 27), the E.C.S. (Original Sheet No. 27A-1), the E.E./D.R. (Original Sheet No. 33), the V.M.P. (Original Sheet No. 36), the T.R.R. (Original Sheet No.44), the M.B.R.S.(Original Sheet No. 29-1), the B.B.S. (Original Sheet No. 30-1) the M.R.B.C.S. (Original Sheet No. 45), the E.N.E.C. (Original Sheet No. 34), and C.R.R.C. (Original Sheet No. 35) which is embedded in the ENEC rates. Further information can be found at RIDER APPLICABILITY (Original Sheet No. 37).

MONTHLY RATE (Cont'd)

Applicable where the Customer installs and owns the street lighting system within a specified area as agreed to by the Customer and the Company.

- ① Effective December 10, 1980, this lamp is no longer available for new installations or for repair or replacement of existing units.
- ② Effective November 2, 1991, this lamp is no longer available for new installations or for repair or replacement of existing units.
- ③ Effective January 1, 2000, this lamp is no longer available for new installations or for repair or replacement of existing units.
- ④ Effective July 28, 2006, this lamp is no longer available for new installations or for repair or replacement of existing lights.
- ⑤ Effective December 1, 2009, this lamp is available for replacement of existing Mercury Vapor streetlights and post top lights.

HOURS OF LIGHTING

All lamps shall burn from one-half hour after sunset until one-half hour before sunrise, every night, burning approximately 4,000 hours per annum.

(C) Indicates Change, (D) Indicates Decrease, (I) Indicates Increase, (N) Indicates New, (O) Indicates Omission, (T) Indicates Temporary

Issued Pursuant to
 P.S.C. West Virginia
 Case No. 20-1040-E-CN
 Order Dated August 4, 2021

Issued By
 Christian T. Beam, President & COO
 Charleston, West Virginia

Effective: Service rendered on or after
 September 1, 2021

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 1st day of October 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, West Virginia 25301
Counsel for Consumer Advocate Division

Susan J. Riggs, Esquire
Jason C. Pizatella, Esquire
Spilman Thomas & Battle, PLLC
300 Kanawha Blvd., East
Charleston, WV 25301
Counsel for WVEUG

Derrick P. Williamson, Esquire
Barry A. Naum, Esquire
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
Counsel for WVEUG

Dorothy E. Jaffe, Esquire
The Sierra Club
50 F Northwest, Eight Floor
Washington, DC 20001
Counsel for The Sierra Club

J. Michael Becher, Esquire
Appalachian Mountain Advocates
PO Box 11571
Charleston, WV 25339
Counsel for The Sierra Club

Evan Dimond Johns, Esquire
Appalachian Mountain Advocates
PO Box 507
Lewisburg, WV 24901
Counsel for The Sierra Club

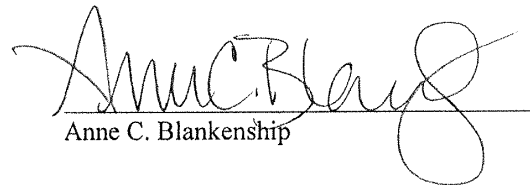
Emmett Pepper, Esquire
Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
Counsel for CAG/SUN/EEWV

Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General


Anne C. Blankenship

03:43 PM OCT 01 2021 EXEC SEC DIV



ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: ach@ramlaw.com

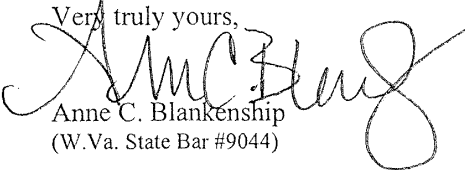
October 1, 2021

Via Hand Delivery
Connie Graley, Executive Secretary
Public Service Commission
of West Virginia
201 Brooks Street
Charleston, WV 25301

Re: Case No. 20-1040-E-CN
Appalachian Power Company and
Wheeling Power Company

Dear Ms. Graley:

I file herewith on behalf of Appalachian Power Company and Wheeling Power Company the original and twelve (12) copies of the affidavits of publication evidencing compliance with the Commission's requirements for the publication of notice in the above-referenced proceeding.

Very truly yours,

Anne C. Blankenship
(W.Va. State Bar #9044)

Counsel for
Appalachian Power Company and
Wheeling Power Company

Enclosures
cc: Service List

irefox

about:blan

Ad Number 116631
HD Media Co LLC
946 5th ave
Huntington WV. 25701

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Boone, TO-WIT

I Jillian Lyons, Classified Advertising

Representative of Coal Valley News, a newspaper
published in the county of Boone, West Virginia, hereby
certify that the annexed publication was inserted in said
newspaper CVN

The cost of publishing said annexed advertisement
as aforesaid was \$ 58.59

Commencing On: 09/22/2021

Ending On: 09/22/2021

Given under my hand this day 09/22/2021

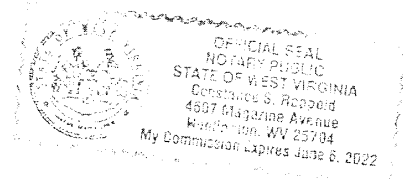
Sworn to and subscribed before me 09/22/2021
at Madison, Boone County, West Virginia

Constance S. Ruppel

Notary Public of, in and for Boone County, West Virginia

MY COMMISSION EXPIRES: JUNE 6, 2022

Jillian Lyons



AFFIDAVIT OF INSERTION- LEGALS

This is to certify that the insertion for APPALACHIAN POWER
(Advertiser Name)

titled CASE NO. 20-1040-E-CN appeared in the
(Headline)

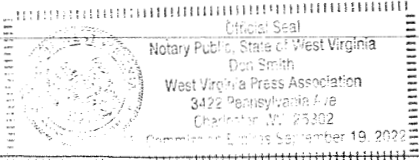
BROOKE COUNTY REVIEW, BROOKE COUNTY on SEPTEMBER 17, 2021
(Paper Name, County) (Run Date)

Cost Of Legal: _____

Advertising Representative: JONATHAN MCGOLDRICK

Sworn to and subscribed before me this 23 day of SEPTEMBER, 20 21

Notary Public: Don Smith

Seal: 

Friday, September 17, 2021

NOTICES



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 million annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

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APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

BCR 09/17/21

irefox

AFFIDAVIT OF PUBLICATION

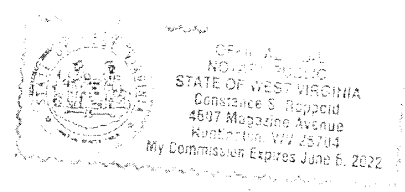
I, Jillian Lyons being duly sworn, depose and say that I am Legal Clerk for *The Herald-Dispatch*, HD Media Co., LLC, who publishes at Huntington, Cabell County, West Virginia, the newspaper *The Herald-Dispatch*, an Independent newspaper, the morning seven days each week, Monday through Sunday including New Year's Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving and Christmas; that I have been duly authorized by the Board of Directors of such corporation and the newspaper mentioned herein; that the legal advertisement attached in the left margin of this affidavit and made a part herof and bearing number 116633 was duly published in the *The Herald-Dispatch* once a week for 1 successive weeks, commencing with its issue of 09/15/2021 and ending with the issue of 09/15/2021, that said legal advertisement was published on the following dates: 09/15/2021 that the cost of publishing said annexed advertisement as aforesaid was \$ 108.11; that such newspaper in which such legal advertisement was published has been and is now published regularly, at least as frequently as once a week for at least fifty weeks during the calendar year as prescribed by its mailing permit and has been so published in the municipality of Huntington, Cabell County, West Virginia, for at least one year immediately preceding the date on which the legal advertisement set forth herein was delivered to such newspaper for publication; that such newspaper is a newspaper of "general circulation" as defined in article 3, chapter 59, of the West Virginia Code within the publication area or areas of the municipality of Huntington, Cabell, Putnam and Wayne Counties, West Virginia, and that such newspaper is circulated to the general public at a definite price or consideration; that such newspaper on each date published consists of not less than four pages without a cover; and that it is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matter, advertisements and other notices.

Taken, subscribed and sworn to before me in my said county this day: 09/15/2021

My commission expires June 6, 2022

Constance P. Rappold
Notary Public
Cabell County, West Virginia

Jillian Lyons



CLAY COUNTY FREE PRESS


136 Main Street, Clay, West Virginia 25043
304-587-4250

CERTIFICATE OF PUBLICATION

State of West Virginia
County of Clay, SS:

I, **Kathleen Stickley**, one of the Editors or Agents of the **Clay County Free Press**, a weekly newspaper of general circulation published at Clay, WV in the County of Clay, State of West Virginia, do certify that publication of the advertisement or advertisements **Case No. 20-1040-E-CN Appalachian Power**, hereto was made in **1 issue(s)** of the newspaper, dated **September 16th, 2021**.

Given under my hand this **16th Day of September 2021**.



Editor or Publisher

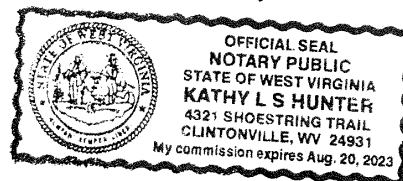
\$82.97
Publication fee

Subscribed and Sworn to before me

This 16 day of September, 2021

My commission expires: August 20, 2023

Signature _____
Notary Public



BECKLEY NEWSPAPERS

P.O. Box 1599, Bluefield, WV 24701
www.register-herald.com Phone: 304-255-4400 • Toll Free: 800-950-0250 • Fax: 304-255-4427

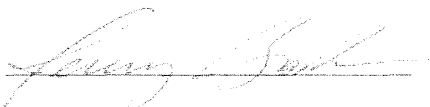
Affidavit of Publication

STATE OF WEST VIRGINIA
COUNTY OF FAYETTE,

I, Jeremy Basham, of The Fayette Tribune, a weekly newspaper published in the City of Oak Hill, Fayette County, West Virginia, do certify that the notice attached hereto under the caption;

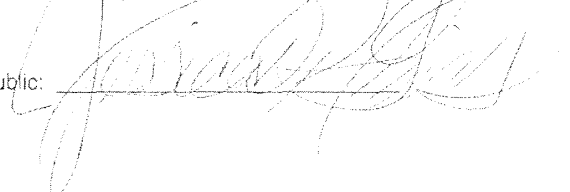
was published in the said Fayette Tribune 1 time(s) on the following day(s), namely 09/16/21

Publication Fee: \$61.68

Signed: 

Subscribed and sworn to before me this day
09/16/2021

My commission expires: Nov. 17, 2025

Notary Public: 



PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities. Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

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The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

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APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY

THE FAYETTE TRIBUNE

ANNOUNCEMENTS

147 Legals
Advertisements

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER
COMPANY
and WHEELING POWER
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APPALACHIAN POWER
COMPANY and
WHEELING POWER COMPANY

The West Virginia Daily News
PO Box 471,
Lewisburg, WV 24901
PHONE: 304-645-1206

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA
COUNTY OF GREENBRIER,
TO WIT:

I, Jandra L Holmes
one of the editors of The West Virginia
Daily News, a daily newspaper of gener
circulation published at Lewisburg, We
Virginia, in the County of Greenbrier,
State of West Virginia, do certify that
publication of the advertisement or
advertisements attached hereto was mad
in One (1) issues
of said newspaper, dated
September 15, 2021

Given under my hand this 15
day of September, 2021
Jandra L Holmes
Editor or Publisher

LEGAL NOTICE

**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COM-
PANY and WHEELING POW-
ER COMPANY public utilities.

Application for a certificate
of public convenience and
necessity for the internal
modifications at coal fired
generating plants necessary
to comply with federal envi-
ronmental regulations and
surcharge.

**NOTICE OF FILING AND EV-
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sity to prohibit the nec-
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Commission, 201 Brooks
Street, in Charleston, West
Virginia. It is also available on
the Commission web docket
found at www.psc.state.wv.us.
Select "Case Information" on
left side of page, and type the
case number above to view
the Application and other

2947 Jefferson Street North, Suite 7
LEWISBURG LOCATION
The Animal Acupuncture Clinic
.....
and Scheduling Appointments
NOW OPEN

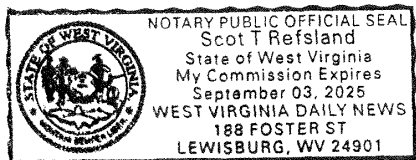
stretched thin right now. We
are doing all we can to sup-
port them. More requests
for facility sanitization are
increasing, and we are co-
ordinating that to get them
and patients at the hospital.
support health care workers
planning a prayer vigil to
- PRAYER VIGIL. We are
situation.
weekly to stay on top of the

Subscribed and sworn to before me this 15 day of SEPT, 2021

My commission expires 3 SEPT 2025

_____, Notary Public

Publication Fee: \$ 121.15



The West Virginia Daily
PO Box 471,
Lewisburg, WV 24
PHONE: 304-645-1

AFFIDAVIT OF PUBLI

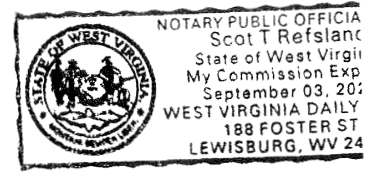
STATE OF WEST VIRGINIA
COUNTY OF GREENUP
TO WIT:

I, Sandra L Holm
one of the editors of The West Virginia Daily News, a daily newspaper circulation published at Lewisburg, Virginia, in the County of Greenup, State of West Virginia, do certify the publication of the advertisements attached hereto in One (1) of said newspaper, dated September 15, 2021.

Given under my hand this 15 day of September 2021
Sandra L Holm
Editor or Publisher

15 day of SEPT

2021
ary Public



LEGAL NOTICE

PUBLIC SERVICE COMMISSION OF WEST VIRGINIA CHARLESTON

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY (15sp)

21.15

AFFIDAVIT OF INSERTION- LEGALS

This is to certify that the insertion for APPALACHIAN POWER
(Advertiser Name)

titled CASE NO. 20-1040-E-CN appeared in the
(Headline)

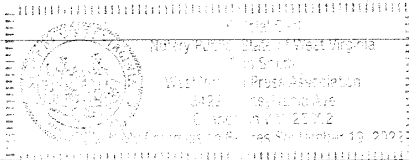
JACKSON STAR NEWS, JACKSON COUNTY on SEPT. 17, 2021
(Paper Name, County) (Run Date)

Cost Of Legal: \$87.79

Advertising Representative: TINA KOCHER

Sworn to and subscribed before me this 23RD day of SEPTEMBER, 20 21

Notary Public: Don Lett

Seal: 

Legals

Request for Bids

The Jackson County Public Library is accepting bids for a certified public accountant to compile an annual audit compilation, fill out and file 941 forms, and the annual 990 form. Please submit your bid to the Jackson County Public Library, 208 North Church Street, Ripley, WV 25271 by October 2nd 2021.

**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

Legals

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Legals

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The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-

Ad Number 116651

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Kanawha, TO-WIT

I Janice Alston, Classified Advertising

Representative of the The Charleston Gazette-Mail, a newspaper

published in the county of Kanawha, West Virginia, hereby

certify that the annexed publication was inserted in said

newspaper The Charleston Gazette-Mail.

The cost of publishing said annexed advertisement

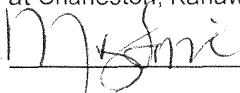
as aforesaid was \$ 125.80

Commencing On: 09/15/2021

Ending On: 09/15/2021

Given under my hand this day 09/15/2021

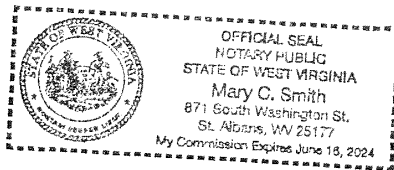
Sworn to and subscribed before me 09/15/2021
at Charleston, Kanawha County, West Virginia



Notary Public of, in and for Kanawha County, West Virginia

MY COMMISSION EXPIRES: 6-16-24





Ad Number 116623

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Lincoln, TO-WIT

I Jillian Lyons, Classified Advertising Representative of

The Lincoln Journal, a newspaper published in the county of Lincoln, West Virginia,

Hereby certify that the annexed publication was inserted in said newspaper *The Lincoln Journal*

The cost of publishing said annexed advertisement as aforesaid was \$94.50

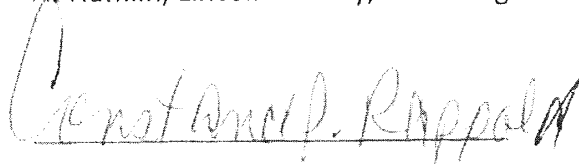
Commencing On: 9/22/2021

Ending on: 9/22/2021

Given under my hand this day

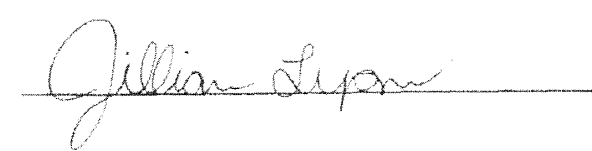
Sworn to and subscribed before me

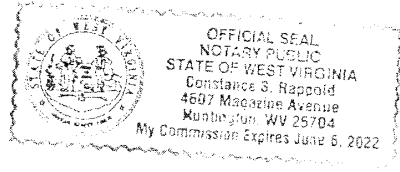
At Hamlin, Lincoln County, West Virginia



Notary Public of, in and for Lincoln County, West Virginia

MY COMMISSION EXPIRES: June 6, 2022





Ad Number 116625

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Lincoln, TO-WIT

I Jillian Lyons, Classified Advertising Representative of

The Lincoln News Sentinel, a newspaper published in the county of Lincoln, West Virginia,

Hereby certify that the annexed publication was inserted in said newspaper

The Lincoln News Sentinel

The cost of publishing said annexed advertisement as aforesaid was \$94.50

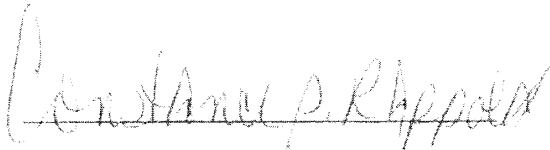
Commencing On: 9/22/2021

Ending on: 9/22/2021

Given under my hand this day

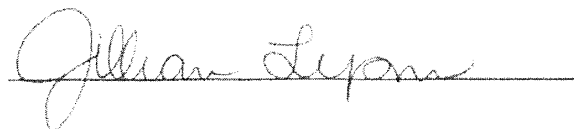
Sworn to and subscribed before me

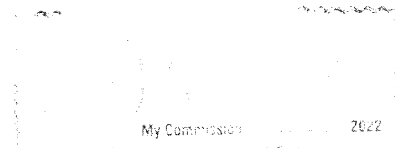
At Hamlin, Lincoln County, West Virginia



Notary Public of, in and for Lincoln County, West Virginia

MY COMMISSION EXPIRES: June 1, 2022





refox

about:blank

Ad Number 116634

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Logan, TO-WIT

I Jillian Lyons, Classified Advertising

Representative of The Logan Banner, a newspaper published in the county of Logan, West Virginia, hereby

certify that the annexed publication was inserted in said newspaper LOGAN

The cost of publishing said annexed advertisement

as aforesaid was \$ 94.00

Commencing On: 09/15/2021

Ending On: 09/15/2021

Given under my hand this day 09/15/2021

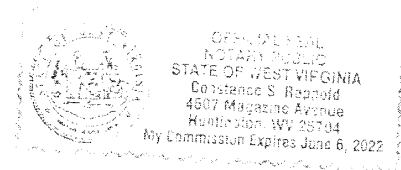
Sworn to and subscribed before me 09/15/2021
at Logan, Logan County, West Virginia

Constance S. Reppold

Notary Public of, in and for Logan County, West Virginia

MY COMMISSION EXPIRES: JUN 6, 2022

Jillian Lyons





(304) 845-2660
 P.O. BOX 369
 MOUNDSVILLE
 WEST VIRGINIA
 26041

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA,
 COUNTY OF MARSHALL, to wit

I, Marlene C Myers being first duly sworn upon my oath, do depose and say:

- that I am Legal Advertising Manager of the MOUNDSVILLE DAILY ECHO, a Republican newspaper;
- that I have been duly authorized to execute this affidavit;
- that such newspaper has been published for over 119 years, is regularly published afternoons daily except Saturdays and Sundays, for at least fifty weeks during the calendar year, in the municipality of Moundsville, Marshall County, West Virginia.
- that such newspaper is a newspaper of "general circulation" as defined in Art. 3, Chap. 59 of the Code of West Virginia 1931 as amended, within Moundsville and Marshall County;
- that such newspaper averages in length four or more pages, exclusive of any cover, per issue;
- that such newspaper is circulated to the general public at a definite price or consideration;
- that such newspaper is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature and for current happenings, announcements, miscellaneous reading matters, advertisements and other notices;
- and that the annexed notice described as follows:

Legal Advertisement

PARTY(ies)

Case#20-1040-E-CN Appalacian&Wheeling power

NATURE (and agency if heard before one)

CERTIF-BILL TO

West Virginia Press Services, Inc
 3422 Pennsylvania Ave.
 Charleston WV 25302

WAS PUBLISHED IN- SAID NEWSPAPER AS FOLLOWS

Times	Dates
1	September 16, 2021

BY WORDS	PUBLICATION CHARGES
687	\$78.98

(signed) Marlene C Myers

NOTARIZATION

Taken, sworn and subscribed before me this 17th
 day of September 2021

Amy M G Shumphy
 Notary Public
 My Commission Expires August 2, 2025

LEGAL ADVERTISEMENT
 PUBLIC SERVICE COMMISSION
 OF WEST VIRGINIA CHARLESTON
 CASE NO. 20-1040-E-CN
 APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities.

Application for a certificate of public convenience and necessity for internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

On December 23, 2020, Appalachian Power Company (APCO) and Wheeling Power Company (WPC) (collectively Companies) filed a verified Application for a Certificate of Public Convenience and Necessity to make internal modifications at coal-generating plants in Putnam, Mason and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs as a result of Orders issued by the West Virginia Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and the Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved construction of certain effluent treatment guidelines (ELG) controls necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original

CROSBY
Game,

By W.G. HENDERSON

Maxx Crosby re-coaching him during one major rule but no bite."

It has stuck with defensive end to

"I want to go everybody, 'listen, about,'" Crosby starts not just on the room, it's meeting That's what I try to do

It's what he did game as a team cap tackles, two sacks a loss in Las Vegas' 33-27 overtime victory Crosby's 93.1 pass Football Focus tied edge rushers in Week

The performance out because it came quarterback Lamar Jackson MVP two seasons ago

"Maxx did a great job. I know he was on me because me and friends. They told me him get me, but he finally a great job."

The performance of AFC Defensive Player

"Anytime you go to a good game, it's always said. "Just trying to get to where it used to be, a Steelers. That's our main and we're really excited

Crosby's preparation peccable leading up to he's provided an exam

345-2660
BOX 369
DSVILLE
VIRGINIA
6041

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LEGAL ADVERTISEMENT
PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA CHARLESTON
CASE NO. 20-1040-E-CN
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PANY and WHEELING POWER COM-
PANY public utilities.

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percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

The Public Service Commission will conduct an evidentiary hearing in this case, if requested by a party or parties to the case, on September 24, 2021, beginning at 9:30 a.m. If held, the evidentiary hearing will be held in the Howard M. Cunningham Hearing Room, Public Service Commission, 201 Brooks Street, Charleston, West Virginia. The evidentiary hearing may be viewed live by videostream at www.psc.state.wv.us.

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APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY

PUBLISHED September 16, 2021.

AFFP

Affidavit of Publication

STATE OF WEST VIRGINIA } SS
COUNTY OF MASON }

Brenda Davis, being duly sworn, says:

That she is CSR of the POINT PLEASANT REGISTER, a daily newspaper of general circulation, printed and published in POINT PLEASANT, MASON County, WEST VIRGINIA; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

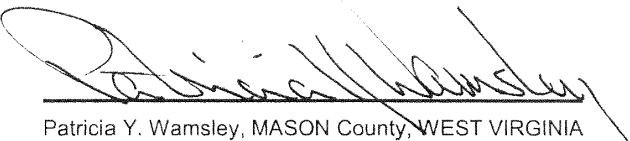
Sep 15, 2021

That said newspaper was regularly issued and circulated on those dates.

SIGNED:



Subscribed to and sworn to me this 15th day of Sep 2021



Patricia Y. Wamsley, MASON County, WEST VIRGINIA

My commission expires: Feb. 17, 2025

\$ 78.28

00039693 90130469 304-342-1011

372-West Virginia Press Service
3422 Pennsylvania Ave
Charleston, WV 25302

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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AFFIDAVIT OF INSERTION- LEGALS

This is to certify that the insertion for APPALACHIAN POWER

(Advertiser Name)

titled CASE No. 20-1040-E-CN appeared in the

(Headline)

THE WELCH NEWS, McDOWELL COUNTY on SEPTEMBER 15, 2021


(Paper Name, County)

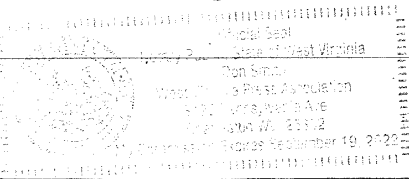
(Run Date)

Cost Of Legal: \$66.24

Advertising Representative: THOMAS MOLIN

Sworn to and subscribed before me this 23RD day of SEPTEMBER 20 21

Notary Public: 


Seal: _____

LEGAL NOTICE

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

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APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

9/15, 11c

BLUEFIELD DAILY TELEGRAPH

PO Box 1599, Bluefield, WV 24701
Phone: 304-327-2801 Toll Free: 800-763-2459 • Fax: 304-327-0433
www.bdtonline.com

Affidavit of Publication

STATE OF WEST VIRGINIA
COUNTY OF MERCER,

I, Jeremy Basham, of the Bluefield Daily Telegraph, a daily newspaper published in the City of Bluefield, Mercer, West Virginia, do certify that the notice attached hereto under the caption;

was published in the said Bluefield Daily Telegraph 1 time(s) on the following day(s), namely 09/15/21

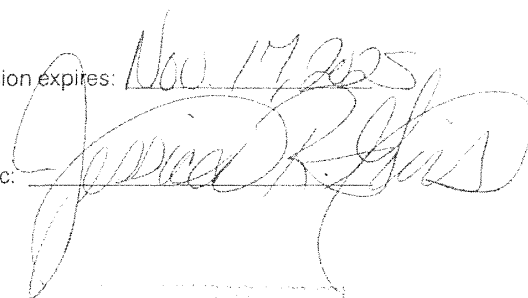
Publication Fee: \$104.49

Signed: _____

Subscribed and sworn to before me this day
09/15/2021

My commission expires: Nov 17 2025

Notary Public: _____



PUBLIC SERVICE COMMISSION OF WEST VIRGINIA CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities. Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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APPALACHIAN POWER
COMPANY and
WHEELING POWER COMPANY

firefox

about:blar

Ad Number 116636

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Mingo, TO-WIT

I Jillian Lyons, Classified Advertising

Representative of the The Williamson Daily News, a newspaper
published in the county of Mingo, West Virginia, hereby
certify that the annexed publication was inserted in said
newspaper WDN

The cost of publishing said annexed advertisement
as aforesaid was \$ 94.00

Commencing On: 09/15/2021

Ending On: 09/15/2021

Given under my hand this day 09/15/2021

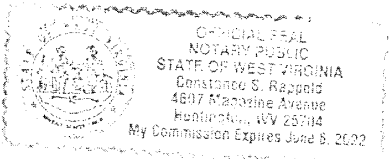
Sworn to and subscribed before me 09/15/2021
at Williamson, Mingo County, West Virginia

Constance S. Rappold

Notary Public of, in and for Mingo County, West Virginia

MY COMMISSION EXPIRES: June 8, 2022

Jillian Lyons



AFFIDAVIT OF INSERTION- LEGALS

This is to certify that the insertion for APPALACHIAN POWER
(Advertiser Name)

titled CASE No. 20-1040-E-CN appeared in the
(Headline)

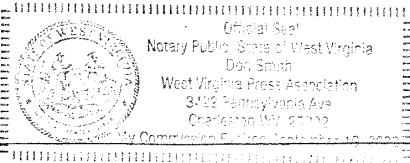
THE MONROE WATCHMAN, MONROE COUNTY on SEPTEMBER 16, 2021
(Paper Name, County) (Run Date)

Cost Of Legal: \$ 104.52

Advertising Representative: CRAIG MOHLER

Sworn to and subscribed before me this 23RD day of SEPTEMBER, 20 21.

Notary Public: Don Smith

Seal: 

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON
CASE NO. 20-1040-E-CN
APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY

public utilities.
Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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Connie Graley, Executive Secretary,
Public Service Commission of West
Virginia, P. O. Box 812, Charleston,
West Virginia 25323.

APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY

sept16-1w

The Nicholas Chronicle

a division of Nicholas County Publishing Company Inc.

I, Raymond W. Corbin, News Editor of The Nicholas Chronicle, a weekly newspaper published at Summersville in the County of Nicholas, and the State of West Virginia, do certify that the hereto attached Legal Advertisement - West Virginia Press Services, Inc., 3422 Pennsylvania Avenue, Charleston WV 25302; NOTICE OF FILING AND EVIDENTIARY HEARING Appalachian Power Company and Wheeling Power Company (Case No. 20-1040-E-CN) appeared in said newspaper for 1 week, on the 16th day of September 2021.

Given under my hand this 16th day of September 2021.

By Raymond W. Corbin, News Editor.

Fee for publication:

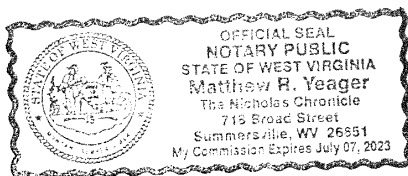
917 words @ \$.12 per word, for a total cost of \$110.04.

The foregoing instrument was acknowledged before me this the 16th day of September 2021.

Matthew R. Yeager

Notary Public

My commission expires July 7, 2023.



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

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APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

9/16 1t

The Intelligencer

1500 Main Street
Wheeling, WV 26003
Phone: 304-233-0100

PUBLIC NOTICE ADVERTISING AFFIDAVIT

WV PRESS/AEP

3422 PENNSYLVANIA AVE.
CHARLESTON, WV 25302

Account Number: L30523
Proof Date: 09-15-21
Ad Number: 240841

ACCOUNT #	DESCRIPTION	LINES	TIMES	PROOF	TOTAL CHARGES
L30523	PUBLIC SERVICE COMMISSION OF WEST VI	171	1	2.00	92.64

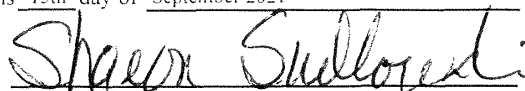
PROOF OF PUBLICATION

Brian Clutter who being duly sworn according to law, deposes and says that he is
Operations Director of The Intelligencer newspaper published in the CITY OF WHEELING,
STATE OF WEST VIRGINIA, hereby certify that the annexed publication was inserted in said
newspaper on the following dates:

Intelligencer: 09-15-21

Sworn to and subscribed before me this 15th day of September 2021





**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY
public utilities.
Application for a certificate
of public convenience and
necessity for the internal
modifications at coal fired

1000 - Legal Notices

generating plants necessary to comply with federal environmental regulations and surcharge.

**NOTICE OF FILING AND
EVIDENTIARY
HEARING**

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at

www.psc.state.wv.us
Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

The Public Service Commission will conduct an evidentiary hearing in this case, if requested by a party or parties to the case, on September 24, 2021, beginning at 9:30 a.m. If held, the evidentiary hearing will be held in the Howard M. Cunningham Hearing Room, Public Service Commission, 201 Brooks Street, Charleston, West Virginia.

The evidentiary hearing may be viewed live by videostream at
www.psc.state.wv.us

Anyone desiring to make written comment should file it at any time prior to the start of the evidentiary hearing. Electronic comment may be made at the above website using the case number for this case. All comments and requests to intervene should briefly state the reason for the comment or intervention. All comments, except those submitted electronically, should be addressed to Connie Graley, Executive Secretary, Public Service Commission of West Virginia, P. O. Box 812, Charleston, West Virginia 25323.

APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY
Int. & N.R. Sept. 15, 2021

Wheeling News-Register

1500 Main Street
Wheeling, WV 26003
Phone: 304-233-0100

PUBLIC NOTICE ADVERTISING AFFIDAVIT

WV PRESS/AEP

3422 PENNSYLVANIA AVE.
CHARLESTON, WV 25302

Account Number: L30523
Proof Date: 09-15-21
Ad Number: 240842

ACCOUNT #	DESCRIPTION	LINES	TIMES	PROOF	TOTAL CHARGES
L30523	PUBLIC SERVICE COMMISSION OF WEST VI	171	1	2.00	92.64

PROOF OF PUBLICATION

Brian Clutter who being duly sworn according to law, deposes and says that he is
Operations Director of the Wheeling News-Register newspaper published in the CITY OF
WHEELING, STATE OF WEST VIRGINIA, hereby certify that the annexed publication was inserted
in said newspaper on the following dates:

News-Register: 09-15-21

Sworn to and subscribed before me this 15th day of September 2021



Sharon Sadlowski

**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY

public utilities.
Application for a certificate
of public convenience and
necessity for the internal
modifications at coal fired
generating plants neces-
sary to comply with
federal environmental re-
gulations and surcharge.

**NOTICE OF FILING AND
EVIDENTIARY
HEARING**

On December 23, 2020,
Appalachian Power Com-
pany (APCo) and Wheel-
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(WPCo) (collectively Com-
panies) filed a duly verified
Application for a Certifi-
cate to make internal
modifications at coal-fired
generating plants in Put-
nam, Mason, and Marshall
Counties.

The Public Service Com-
mission of West Virginia
approved the application
on August 4, 2021. The
modifications will be
phased in over an approxi-
mate four-year period be-
ginning in 2021. As origi-
nally filed, the estimated
annual West Virginia reve-
nue requirements after full
phase-in of the planned
modifications were \$23.5
million, an increase of ap-
proximately 1.62%.

On September 8, 2021,
the Companies filed up-
dated data to reflect
changes in estimated
costs and the impact of
Orders issued by the Ken-
tucky Public Service Com-
mission (KPSC) which
also has jurisdiction over
the plant in Marshall
County and Virginia State
Corporation Commission
(VSCC) which shares jur-
isdiction over the plants in
Putnam and Mason Coun-

1000 - Legal Notices

ties. Neither commission
approved the construction
of certain effluent limita-
tion guidelines (ELG) con-
trols that are necessary to
allow the plants to contin-
ue to operate after 2028.
The Companies requested
that the Commission rule
that effluent control costs
will be the responsibility of
West Virginia customers if
the Commission required
installation of the ELG
controls and operation of
the plants after 2028 and
KPSC and VSCC contin-
ued to prohibit the neces-
sary investments that
would allow the plants to
operate after 2028.

The updated costs and al-
location of effluent control
costs to West Virginia are
projected to increase the
annual revenue require-
ments after full phase-in of
the planned modifications
to \$48.0 million. Based on
the original percentage in-
creases provided by the
Companies, the revised
\$48.0 annual revenue re-
quirement that would go
into effect after the full
phase-in of all planned up-
grades is estimated to im-
pact West Virginia rates
by approximately 3.3%.

The Companies' filing is
on file with and available
for public inspection at the
Public Service Commis-
sion, 201 Brooks Street, in
Charleston, West Virginia.
It is also available on the
Commission web docket
found at

www.psc.state.wv.us
Select "Case Information"
on left side of page, and
type the case number
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tion and other documents
filed in this case.

The Public Service Com-
mission will conduct an
evidentiary hearing in this
case, if requested by a
party or parties to the
case, on September 24,
2021, beginning at 9:30
a.m. If held, the evidenti-
ary hearing will be held in
the Howard M. Cunning-
ham Hearing Room, Pub-
lic Service Commission,
201 Brooks Street,
Charleston, West Virginia.

The evidentiary hearing
may be viewed live by
videostream at

www.psc.state.wv.us

Anyone desiring to make
written comment should
file it at any time prior to
the start of the evidentiary
hearing. Electronic com-
ment may be made at the
above website using the
case number for this case.
All comments and re-
quests to intervene should
briefly state the reason for
the comment or interven-
tion. All comments, ex-
cept those submitted elec-
tronically, should be ad-
dressed to Connie Graley,
Executive Secretary, Pub-
lic Service Commission of
West Virginia, P. O. Box
812, Charleston, West Vir-
ginia 25323.

APPALACHIAN POWER
COMPANY
and WHEELING POWER
COMPANY
Int. & N.R. Sept. 15, 2021

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY ED 1900
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

**NOTICE OF FILING AND
EVIDENTIARY HEARING**

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

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RON ALLEN
PUBLISHER

PHONE 304-562-9881

THE HURRICANE BREEZE

THE WEEKLY NEWSPAPER FOR ALL OF PUTNAM COUNTY
P.O. BOX 310
HURRICANE, WEST VIRGINIA 25526

CERTIFICATE OF PUBLICATION

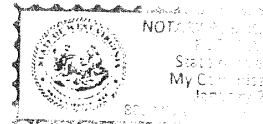
STATE OF WEST VIRGINIA,
COUNTY OF PUTNAM, To wit:

This day personally appeared before me, a Notary Public of said County of Putnam, Ron Allen..... of The Hurricane Breeze, and after being duly sworn deposes and says that the attached legal publication was duly published in The Hurricane Breeze for One (1) consecutive issues, in its issues dated September 16, 2021.


.....
The Hurricane Breeze

Subscribed and sworn to before me this .. 16th.... day
of September..... 2021..





Anyone desiring to make written comment should file it at any time prior to the start of the evidentiary hearing. Electronic comment may be made at the above website using the case number for this case. All comments and requests to intervene should briefly state the reason for the comment or intervention. All comments, except those submitted electronically, should be addressed to Connie Graley, Executive Secretary, Public Service Commission of West Virginia, P. O. Box 812, Charleston, West Virginia 25323.

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

BECKLEY NEWSPAPERS

P.O. Box 1599, Bluefield, WV 24701
www.register-herald.com Phone: 304-255-4400 • Toll Free: 800-950-0250 • Fax: 304-255-4427

Affidavit of Publication

STATE OF WEST VIRGINIA
COUNTY OF RALEIGH,

I, Jeremy Basham, of The Register-Herald, a daily newspaper published in the City of Beckley, Raleigh, West Virginia, do certify that the notice attached hereto under the caption;

was published in the said The Register-Herald 1 time(s) on the following day(s), namely 09/16/21

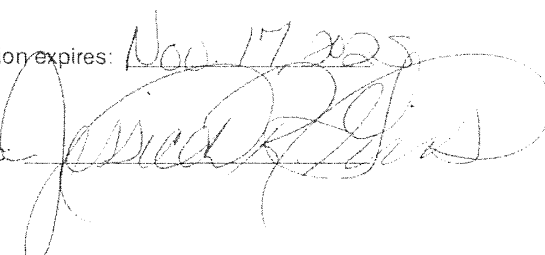
Publication Fee: \$104.49

Signed: _____

Subscribed and sworn to before me this day
09/16/2021

My commission expires: Nov 17 2025

Notary Public: _____



PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities. Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

The Public Service Commission will conduct an evidentiary hearing in this case, if requested by a party or parties to the case, on September 24, 2021, beginning at 9:30 a.m. If held, the evidentiary hearing will be held in the Howard M. Cunningham Hearing Room, Public Service Commission, 201 Brooks Street, Charleston, West Virginia. The evidentiary hearing may be viewed live by videostream at www.psc.state.wv.us.

Anyone desiring to make written comment should file it at any time prior to the start of the evidentiary hearing. Electronic comment may be made at the above website using the case number for this case. All comments and requests to intervene should briefly state the reason for the comment or intervention. All comments, except those submitted electronically, should be addressed to Connie Graley, Executive Secretary, Public Service Commission of West Virginia, P. O. Box 612, Charleston, West Virginia 25323.

APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

Case No. 20-1040-E-CN
APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
Electric utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications are \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which also has jurisdiction over the plants in Putnam and Mason Counties. Neither the Commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary modifications that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are expected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 million annual revenue requirement that would go into effect after the full phase-in of all planned modifications is estimated to impact West Virginia rates by approximately 3.3%.

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APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY

9/21 B

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA, COUNTY OF ROANE, To-wit: I, Starr Hedges, do solemnly swear that I am Legal Advertising Manager of Spencer Newspapers Inc., a corporation, publisher of the newspaper entitled *The Times Record*, a Republican newspaper; that I have been duly authorized to execute this affidavit of publication; that such newspaper has been published for more than one year prior to publication of the annexed notice described below; that such newspaper is regularly published weekly, for at least fifty weeks during the calendar year, in the Municipality of Spencer, Roane County, West Virginia; that such newspaper is a newspaper of "general circulation," as that term is defined in Article 3, Chapter 59 of the Code of West Virginia, 1931, as amended, within the publication area of the aforesaid municipality and county and adjoining counties; that such newspaper averages in length four or more pages, exclusive of any cover, per issue; that such newspaper is circulated to the general public at a definite price or consideration; that such newspaper is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matters, advertisements, and other notices; that the annexed notice of

NOTICE OF FILING AND HEARING

was published ONE time(s) in said newspaper on the following dates:

SEPTEMBER 16, 2021

and the cost of publishing this said notice was \$99.36

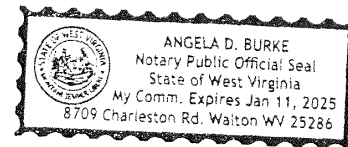
Starr Hedges

Legal Advertising Manager

Subscribed and sworn to before me in my said county this 17th day of September, 2021

Angela D. Burke

Notary Public of Roane County, West Virginia



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

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APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY

11/9/21 B

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA, COUNTY OF ROANE, To-w Starr Hedges, do solemnly swear that I am Legal Advertising Manager of Spencer Newspapers Inc., a corporation, publisher of the newspaper entitled *The Times Record*, a Reputable newspaper; that I have been duly authorized to execute this affidavit of publication; that such newspaper has been published for more than one year prior to publication of the annexed notice described below; that such newspaper is regularly published weekly, for at least fifty weeks during the calendar year, in the Municipality of Spencer, Roane County, West Virginia; that such newspaper is a newspaper of "general circulation," as that term is defined in Article 3, Chapter 59 of the Code of West Virginia, 1931, as amended, within the publication area of the aforesaid municipality and county and adjoining counties; that such newspaper averages in length four or more pages, exclusive of cover, per issue; that such newspaper is circulated to the general public at a definite price or consideration; that such newspaper is a newspaper to which the general public resorts for passing events, a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading material, advertisements, and other notices; that the annexed notice of

NOTICE OF FILING AND HEARING

was published ONE time(s) in said newspaper on the following dates:

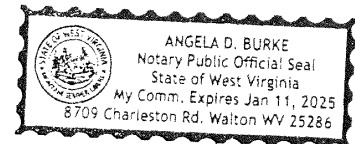
SEPTEMBER 16, 2021

and the cost of publishing this said notice was \$99.36

Starr Hedges
Legal Advertising Manager

Subscribed and sworn to before me in my said county this 17 day of September, 2021

Angela D. Burke
Notary Public of Roane County, West Virginia



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

NO. 20-1040-E-CN
APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY
utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

December 23, 2020, Appalachian Power Company (APCo) and Wheeling Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

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Updated costs and allocation of effluent control costs to West Virginia are estimated to increase the annual revenue requirements after full phase-in of planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned modifications is estimated to impact West Virginia rates by approximately 3.3%.

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APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA, COUNTY OF ROANE, To-wit: I, Starr Hedges, do solemnly swear that I am Legal Advertising Manager of Spencer Newspapers Inc., a corporation, publisher of the newspaper entitled the **Roane County Reporter**, a Democratic newspaper; that I have been duly authorized to execute this affidavit of publication; that such newspaper has been published for more than one year prior to publication of the annexed notice described below; that such newspaper is regularly published weekly, for at least fifty weeks during the calendar year, in the Municipality of Spencer, Roane County, West Virginia; that such newspaper is a newspaper of "general circulation," as that term is defined in Article 3, Chapter 59 of the Code of West Virginia, 1931, as amended, within the publication area of the aforesaid municipality and county and adjoining counties; that such newspaper averages in length four or more pages, exclusive of any cover, per issue; that such newspaper is circulated to the general public at a definite price or consideration; that such newspaper is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matters, advertisements, and other notices; that the annexed notice of

NOTICE OF FILING AND HEARING

was published ONE time(s) in said newspaper on the following dates:

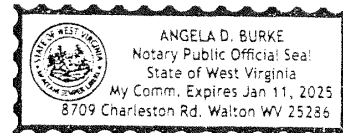
SEPTEMBER 16, 2021

and the cost of publishing this said notice was \$99.36

Starr Hedges
Legal Advertising Manager

Subscribed and sworn to before me in my said county this 17th day of *Sept*, 2021

Angela D. Burke
Notary Public of Roane County, West Virginia



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY
public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

NOTICE OF FILING AND EVIDENTIARY HEARING

On December 23, 2020, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a duly verified Application for a Certificate to make internal modifications at coal-fired generating plants in Putnam, Mason, and Marshall Counties.

The Public Service Commission of West Virginia approved the application on August 4, 2021. The modifications will be phased in over an approximate four-year period beginning in 2021. As originally filed, the estimated annual West Virginia revenue requirements after full phase-in of the planned modifications were \$23.5 million, an increase of approximately 1.62%.

On September 8, 2021, the Companies filed updated data to reflect changes in estimated costs and the impact of Orders issued by the Kentucky Public Service Commission (KPSC) which also has jurisdiction over the plant in Marshall County and Virginia State Corporation Commission (VSCC) which shares jurisdiction over the plants in Putnam and Mason Counties. Neither commission approved the construction of certain effluent limitation guidelines (ELG) controls that are necessary to allow the plants to continue to operate after 2028. The Companies requested that the Commission rule that effluent control costs will be the responsibility of West Virginia customers if the Commission required installation of the ELG controls and operation of the plants after 2028 and KPSC and VSCC continued to prohibit the necessary investments that would allow the plants to operate after 2028.

The updated costs and allocation of effluent control costs to West Virginia are projected to increase the annual revenue requirements after full phase-in of the planned modifications to \$48.0 million. Based on the original percentage increases provided by the Companies, the revised \$48.0 annual revenue requirement that would go into effect after the full phase-in of all planned upgrades is estimated to impact West Virginia rates by approximately 3.3%.

The Companies' filing is on file with and available for public inspection at the Public Service Commission, 201 Brooks Street, in Charleston, West Virginia. It is also available on the Commission web docket found at www.psc.state.wv.us. Select "Case Information" on left side of page, and type the case number above to view the Application and other documents filed in this case.

The Public Service Commission will conduct an evidentiary hearing in this case, if requested by a party or parties to the case, on September 24, 2021, beginning at 9:30 a.m. If held, the evidentiary hearing will be held in the Howard M. Cunningham Hearing Room, Public Service Commission, 201 Brooks Street, Charleston, West Virginia. The evidentiary hearing may be viewed live by videostream at www.psc.state.wv.us.

Anyone desiring to make written comment should file it at any time prior to the start of the evidentiary hearing. Electronic comment may be made at the above website using the case number for this case. All comments and requests to intervene should briefly state the reason for the comment or intervention. All comments, except those submitted electronically, should be addressed to Connie Graley, Executive Secretary, Public Service Commission of West Virginia, P. O. Box 812, Charleston, West Virginia 25323.

APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY

1t 9/16/21 B

AFFIDAVIT OF PUBLICATI

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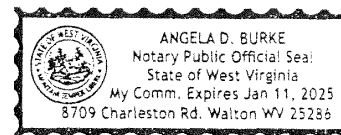
Seton Nudge

Legal Advertising M

Subscribed and sworn to before me in my said county this day of Sept, 2021

Angela D. Burke

Notary Public of Roane County, West V



**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY public utilities.

Application for a certificate of public convenience and necessity for the internal modifications at coal fired generating plants necessary to comply with federal environmental regulations and surcharge.

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www.psc.state.wv.us.

Anyone desirous of submitting comments at any time prior to the evidentiary hearing should submit a written comment to the above web site number for this hearing and request should be submitted to the Commission. All comments should be submitted electronically to the Commission Secretary, P. O. Box 812, Charleston, West Virginia 25323. APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY (15SP)

**The Hinton News
PO Box 471,
Lewisburg, WV 24901
PHONE: 304-645-1206**

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA
COUNTY OF SUMMERS,
TO WIT:

I, Sandra L. Holmes,
one of the editors of The Hinton News,
a daily newspaper of general circulation
published in Hinton, West Virginia, in
the County of Summers, State of West
Virginia, do certify that publication of the
advertisement or advertisements attached
hereto was made in one (1)

issues of said newspaper, dated

September 15, 2021

Given under my hand this 15
day of September, 2021

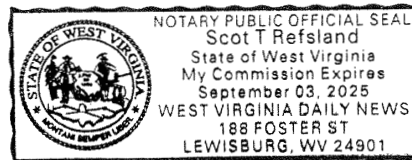
Sandra L. Holmes
Editor or Publisher

15 day of SEPT, 2021

My commission expires 3 SEPT 2025

_____, Notary Public

Publication Fee: \$ 121.15



**PUBLIC SERVICE
COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN
APPALACHIAN POWER COM-
PANY and WHEELING POWER
COMPANY public utilities.

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The Hinton News
PO Box 471,
Lewisburg, WV 24901
PHONE: 304-645-1206

NOTICE OF PUBLICATION

OF WEST VIRGINIA
COUNTY OF SUMMERS,
TO WIT:

Debra L. Holmes
Editors of The Hinton News,

a daily newspaper of general circulation published in Hinton, West Virginia, in the County of Summers, State of West Virginia, do certify that publication of the advertisement or advertisements attached hereto was made in one (1)

issues of said newspaper, dated

September 15, 2021

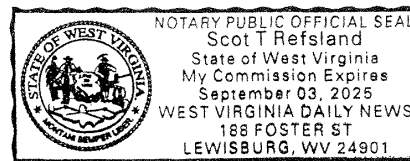
Given under my hand this 15
day of September, 2021

Jandra L. Jones
Editor or Publisher

My commission expires 3 SEPT 2025 15 day of SEPT, 2021

_____, Notary Public

Publication Fee: \$ 121.15



irefox

about:blar

Ad Number 116643

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF WAYNE, TO-WIT

I Jillian Lyons, Classified Advertising

Representative of the Wayne County News, a newspaper
published in the county of Wayne, West Virginia, hereby
certify that the annexed publication was inserted in said
newspaper at a cost of \$ 93.56

WYN

Commencing On: 09/15/2021

Ending On: 09/15/2021

Given under my hand this day 09/15/2021

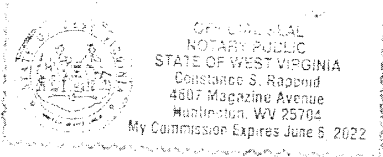
Jillian Lyons

Sworn to and subscribed before me 09/15/2021
at Wayne, Wayne County, West Virginia

Constance S. Rappold

Notary Public of, in and for Wayne County, West Virginia

MY COMMISSION EXPIRES: June 5, 2022



AFFIDAVIT OF INSERTION- LEGALS

This is to certify that the insertion for APPALACHIAN POWER
(Advertiser Name)

titled CASE No. 20-1040-E-CN appeared in the
(Headline)

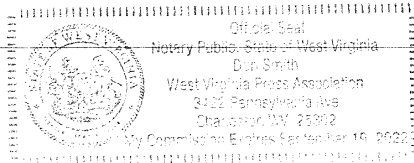
THE INDEPENDENT HERALD, WYOMING COUNTY on SEPTEMBER 16, 2021
(Paper Name, County) (Run Date)

Cost Of Legal: \$39.69

Advertising Representative: THOMAS MOLIN

Sworn to and subscribed before me this 23 day of SEPTEMBER, 20 21

Notary Public: Don Smith



Seal: _____

LEGAL NOTICE

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

public utilities.

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APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 1st day of October 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, West Virginia 25301
Counsel for Consumer Advocate Division

Susan J. Riggs, Esquire
Jason C. Pizatella, Esquire
Spilman Thomas & Battle, PLLC
300 Kanawha Blvd., East
Charleston, WV 25301
Counsel for WVEUG

Derrick P. Williamson, Esquire
Barry A. Naum, Esquire
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
Counsel for WVEUG

Dorothy E. Jaffe, Esquire
The Sierra Club
50 F Northwest, Eight Floor
Washington, DC 20001
Counsel for The Sierra Club

J. Michael Becher, Esquire
Appalachian Mountain Advocates
PO Box 11571
Charleston, WV 25339
Counsel for The Sierra Club

Evan Dimond Johns, Esquire
Appalachian Mountain Advocates
PO Box 507
Lewisburg, WV 24901
Counsel for The Sierra Club

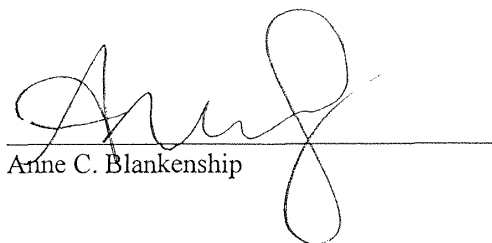
Emmett Pepper, Esquire
Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
Counsel for CAG/SUN/EEWV

Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General



Anne C. Blankenship

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

* * * * *

IN RE: APPALACHIAN POWER COMPANY*

AND WHEELING POWER COMPANY * 20-1040-E-CN

*

* * * * *

HEARING TRANSCRIPT

* * * * *

BEFORE: CHARLOTTE LANE, Chairman

RENEE LARRICK, Commissioner

WILLIAM RANEY, Commissioner

HEARING: Friday, September 24, 2021

8:04 a.m.

LOCATION: PSC Howard M. Cunningham Hearing Room

201 Brooks Street

Charleston WV

Reporter: Jennifer Wilson

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is prohibited without authorization
by the certifying agency.

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A P P E A R A N C E S

LUCAS HEAD, ESQUIRE

Public Service Commission of West Virginia

201 Brooks Street

Charleston, WV 25301

Counsel for the PSC

JONATHON C. STANLEY, ESQUIRE

Robinson & McElwee, PLLC

700 Virginia Street East

Suite 400

Charleston, WV 25301

Counsel for Appalachian Power Company and Wheeling
Power Company

BARRY A. NAUM, ESQUIRE

Spilman, Thomas & Battle

1100 Bent Creek Boulevard

Suite 101

Mechanicsburg, PA 17050

Counsel for the West Virginia Energy Users Group

1 A P P E A R A N C E S (Cont.)

2

3 HEATHER OSBORN, ESQUIRE

4 Consumer Advocate Division

5 Public Service Commission of West Virginia

6 300 Capitol Street

7 Suite 810

8 Charleston, WV 25301

9 Counsel for the Consumer Advocate Division

10

11 JACOB C. ALTMAYER, ESQUIRE

12 BRANN ALTMAYER, ESQUIRE

13 Phillips, Gardill, Kaiser & Altmeyer, PLLC

14 61 14th Street

15 Wheeling, WV 2600

16 Counsel for the WV Coal Association

17

18 J. MICHAEL BECHER, ESQUIRE

19 Appalachian Headwaters

20 1046 Washington Street East

21 Suite 1

22 P.O. Box 468

23 Lewisburg, WV 24901

24 Counsel for the Sierra Club

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A P P E A R A N C E S (Cont.)

EMMETT PEPPER, ESQUIRE

West Virginia Citizen Action Group

1500 Dixie Street

Charleston, WV 2511

Counsel for the West Virginia Citizen Action Group

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E X H I B I T S

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P R O C E E D I N G S

CHAIRMAN LANE:

Good morning. I'm Charlotte Lane, with the Public Service Commission of West Virginia. With me are Commissioner Renee Larrick, and Commissioner William Raney.

We are here this morning to listen to public comment on the petition to reopen in case number 20-1040-E-CN, Appalachian Power Company and Wheeling Power Company. The public comment proceeding is being held electronically via the internet and in-person. I am in the hearing room with Commissioners Renee Larrick and William Raney, the Court Reporter, and the law clerk. The public comment proceeding is being recorded and a transcript will be available on the Commission web docket.

On August 4, 2021, the Commission granted a certificate of convenience and necessity to Appalachian Power Company and Wheeling Power Company to make internal modifications necessary to comply with the federal environmental regulations at the AMOS, Mountaineer, and Mitchell coal-fired generating plants to keep those plants open until 2040. The Commission also authorized cost recovery for the project through a

1 surcharge. The Companies estimated during the original
2 case that the investment for alternative one would be
3 \$250,000,000 by APCo and AMOS and Mountaineer, and
4 \$67,000,000 by Wheeling Power for its 50 percent share at
5 Mitchell for a total of \$317,000,000 to be funded through
6 internal financing.

7 On September 8, 2021, the Companies
8 filed a petition to reopen and to take further action in
9 this case because the Virginia State Corporation
10 Commission and Kentucky Public Service Commission, which
11 have interests in AMOS, and Mountaineer, and Mitchell
12 respectively, denied the Companies proposal to complete
13 all environmental modifications and keep the plants open
14 until 2040. The Companies now request that this
15 Commission approve the costs of the entire project.
16 Several parties filed responses to the petition to
17 reopen. To date, the case has received approximately 277
18 letters in support of the project, including 20 filed
19 after the petition to reopen was filed, and 479 letters
20 opposing the project in some form, including 143 letters
21 filed after the petition to reopen was filed.

22 I remind you that this is not an
23 evidentiary hearing. It is a public comment proceeding
24 and we are here to listen to your comments. If something
25 is raised by these public comments that is either not

1 addressed in or needs clarified at the evidentiary
2 hearing, we usually will ask the Company to address the
3 issue at the evidentiary hearing. At this time, I'm
4 going to have Counsel for parties introduce themselves.

5 ATTORNEY STANLEY:

6 Thank you, Chairman Lane. This is
7 Jonathon Stanley, with Robinson and McElwee Law Firm on
8 behalf of Wheeling and Appalachian Power Company.

9 CHAIR:

10 Consumer Advocate?

11 ATTORNEY OSBORN:

12 Good morning. Heather Osborn, on
13 behalf of the Consumer Advocate Division.

14 CHAIR:

15 West Virginia Energy Users Group?

16 ATTORNEY NAUM:

17 Yes. Good morning, Chairman,
18 Commissioners. Barry Naum, from the law firm of Spilman,
19 Thomas and Battle, PLLC representing the West Virginia
20 Energy Users Group. I've read this in the initial case,
21 but I'll just mention who our members are for the
22 purposes of this case again. WVEUG's members consist of
23 the Chemours Company, LLC; Constellium Rolled Products
24 Ravenswood, LLC; Eagle Natrium Westlake; Marathon
25 Petroleum Company, LP; Mark West; and WVA Manufacturing,

1 LLC. Thank you.

2 CHAIR:

3 Sierra Club?

4 ATTORNEY BECHER:

5 Thank you, Madam Chairman. Michael
6 Becher, from Appalachian Mountain Advocate representing
7 Sierra Club.

8 CHAIR:

9 Citizens Actions Groups, SUN, EEVW?

10 ATTORNEY PEPPER:

11 Good morning, Chairman. My name's
12 Emmett Pepper, and I'm with Citizen Action Group formerly
13 known as Energy Efficient West Virginia. Also appearing
14 today later are co-counsel Shannon Fisk, and Raghu
15 Murthy.

16 CHAIR:

17 And you're going to have to speak more
18 into the microphone, but I heard you this time. But next
19 time, speak a little bit closer to the microphone.

20 West Virginia Coal Association?

21 ATTORNEY JACOB ALTMAYER:

22 Good morning, Madam Chairman. Jake
23 Altmeyer, here appearing virtually along with my
24 co-counsel, Brann Altmeyer. Can you hear us okay?

25 CHAIR:

1 Yes. Staff?

2 ATTORNEY HEAD:

3 Good morning, Chairman. Lucas Head, on
4 behalf of Public Service Commission Staff.

5 CHAIR:

6 And I guess the Attorney General is not
7 appearing at this hearing.

8 If you have already filed a written
9 comment that is the same and just as good as making a
10 statement at this proceeding, you are not required to
11 make another statement to be considered by the
12 Commission. Filing a written comment, however, does not
13 prevent you from making statements this morning if you so
14 desire.

15 We ask that you turn off your
16 cellphones.

17 We want to hear from as many of you as
18 possible, but please be as brief and as concise as you
19 possibly can. We have --- we have 13 people signed up to
20 make public comment and we have --- we now have 14 people
21 signed up. And so as indicated, we allowed an hour for
22 this public comment. And so we're going to limit each
23 public comment to about three minutes. And I will
24 alternate between those who are opposed to the proposal
25 and those who are supporting. And so first, we will call

1 Gaylene Miller, state director of AARP.

2 Okay. Now, we do have a Court
3 Reporter. And so when you come up here to the stand,
4 make sure that you speak directly into the microphone and
5 please spell your name for the Court Reporter.

6 MS. MILLER:

7 Good morning, Chairman Lane,
8 Commissioner Larrick and Commissioner Raney. I'm Gaylene
9 Miller, G-A-Y-L-E-N-E, M-I-L-L-E-R, and I'm the state
10 director for AARP in West Virginia. On behalf of our
11 252,000 AARP members in West Virginia, I thank you for
12 the opportunity to provide public comments on this
13 important matter. And while we appreciate that the PSC
14 scheduled a public hearing, we don't think the timeline
15 set by the Commission provides an adequate opportunity
16 for public comment. This is a case that widely impacts
17 half of ratepayers in 23 counties from Wheeling to Welch.

18 And we believe that a one hour hearing scheduled at 8:00
19 a.m. on a Friday does not do justice to this critical
20 matter. We urge the PSC to schedule at least one more
21 public comment hearing for a longer period and include an
22 opportunity for evening participation. Doing so fulfills
23 the true spirit of public comment and provides AEP
24 ratepayers an opportunity to have their voices heard.

25 AARP is a fierce defender for people 50

1 and older and their families. Many of our members in the
2 state already struggle to make ends meet. Many are low
3 income while others live super fixed incomes. They
4 simply do not have the ability to absorb additional fees
5 without having to make difficult trade-offs in spending
6 for food, medicine, or transportation. AEP's latest
7 request doubles the initial rate increase from 1.5
8 percent to 3.3 percent and sets consumers, businesses,
9 and industry in West Virginia on the hope of loan for
10 \$448,000,000 in cost responsibility. The plan to serve
11 customers in three states and two of the states, Kentucky
12 and Virginia, have denied the spending request. AARP
13 urges the West Virginia PSC to do the same. It is
14 patently unfair for West Virginia ratepayers alone to be
15 burdened with nearly half a million dollars in cost
16 responsibility that should be shared by ratepayers in two
17 other states. In summary, we urge the PSC to deny AEP's
18 request. It is both unfair and unjust to have West
19 Virginia ratepayers pay for costs to serve customers in
20 two other states and will cause very real economic
21 burdens on numerous mountain state residents. Thank you
22 again for the opportunity to comment.

23 CHAIR:

24 Thank you. Next is George Capel. And
25 you can take your mask off. It'll be easier to hear.

1 MR. CAPEL:

2 Sure. Thank you. Good morning, Madam
3 Chair. Good morning, Commissioners. My name is George
4 Capel. I represent --- well, George Capel, G-E-O-R-G-E,
5 C-A-P as in Paul-E-L. And I represent the West Virginia
6 State Building and Construction Trades, which is made up
7 of about 22,000 construction workers, many of whom do
8 work or have worked at these plants we're talking about
9 here this morning. In fact, that's the main point that I
10 want to bring to your attention because our membership
11 works about 1,000,000 hours at these plants every single
12 year. And so I come to you this morning respectfully
13 asking you to consider what it might look like in terms
14 of lost tax revenue and lost commerce if these workers
15 were displaced and forced to relocate because of these
16 plants closing their doors.

17 Now, let me be clear because we support
18 renewable forms of energy. We have workers on wind and
19 solar projects all across the state right now. However,
20 the fact of the matter is this. There's nothing on the
21 record to indicate that anything comparable to the output
22 of these facilities is going to be built in West Virginia
23 in the near future. And so because of that, you know, I
24 believe our workers may have to seek employment
25 elsewhere, most likely in other states. So because of

1 that, I believe that negative economic impact of closing
2 these plants would be frankly devastating to those
3 communities, bad for our state's economy, and I believe
4 West Virginia as a whole would pay the price in the long
5 run. So I appreciate the work that you do. I certainly
6 don't envy you being in the position that you're in
7 having to make this judgement call. But I respectfully
8 ask that you consider this aspect of the situation and
9 our membership when you make your decision to this
10 matter.

11 CHAIR:

12 Thank you.

13 MR. CAPEL:

14 Thank you.

15 CHAIR:

16 Next, Linda Frame.

17 MS. FRAME:

18 Good morning. Can you hear me all
19 right?

20 CHAIR:

21 Yes.

22 MS. FRAME:

23 Thank you so much. Good morning. I'm
24 Linda Frame, F-R-A-M-E, the West Virginia Environmental
25 Council and I'm also an AEP customer. I appreciate the

1 opportunity to speak today and afforded the opportunity
2 to be here virtually. The question before us is if West
3 Virginia ratepayers should foot the bill for keeping
4 aging coal plants open at a cost of hundreds of millions
5 of dollars. All this while our neighbors in Virginia and
6 Kentucky have said no.

7 West Virginia has already given a lot
8 to the coal industry. We paid for it for decades with
9 the hidden cost to our water quality, our air quality,
10 our health, and mess left behind from being in the coal
11 mines. This is presented to us as a fair deal because we
12 enjoy some of the lowest utility rates in the nation.
13 Now, however, we have to add another burden to the list
14 of those to take a hit, and that's the West Virginia
15 ratepayers. Things aren't going well for us. From 2008
16 to 2020, our electricity rates have more than doubled.
17 No other state has seen its rates increase faster than
18 us. And now we are being asked to pay even more to keep
19 three plants open well past their prime when two of our
20 border states have said no to this bailout.

21 There are so many reasons that make
22 sense to turn AEP away this time. Solar energy is
23 expanding and creating jobs here. There is no room for
24 coal if we want to fend off future client investors
25 brought by the burning of fossil fuels for which West

1 Virginia gets extreme flooding due to climate change.
2 And the impacts of climate change are here. It's already
3 happening. So no, we don't owe coal, it owes us. It
4 owes us with a goodbye and the shuttering of those dirty
5 plants instead of asking us for more. So please,
6 Commissioners, please do the right thing. Protect West
7 Virginia ratepayers. Turn away AEP just as Kentucky and
8 West --- I'm sorry, and Virginia are doing, and I hope
9 West Virginia does. And thank you so much for your time.

10 CHAIR:

11 Thank you. Next, Chad Francis. You
12 may take off your mask.

13 MR. FRANCIS:

14 Good morning, ladies and gentlemen.
15 First off, I'd like to thank you, Madam Chairwoman and
16 members of the Committee for this opportunity to express
17 our opinion and concerns. My name is Chad Francis. I'm
18 a representative from the United Mineworkers of America.

19 CHAIR:

20 Can you spell your name, please?

21 MR. FRANCIS:

22 Yes. Chad Francis, C-H-A-D,
23 F-R-A-N-C-I-S. Like I said, I'm a representative from
24 the United Mineworkers of America. Our members mine
25 millions of tons of West Virginia coal that are delivered

1 to these plants annually. Today, I'd like to reiterate
2 our position on helping sustain coal communities
3 throughout West Virginia. A premature closure of yet
4 another coal-fired power plant would be detrimental to
5 the community it helps support. And without jobs in
6 place to pay a living wage, healthcare, and retirement,
7 we would be in turn putting the cart before the horse.
8 We support keeping our current
9 coal-fired power plants operating and running as cleanly
10 and efficiently as possible so in turn, West Virginia
11 families can have a chance to live the American Dream.
12 We support the committee's August decision. So let's
13 keep the lights on in West Virginia. We need the base
14 load power coal provides. Thank you all for your time.

15 CHAIR:

16 Thank you. Bill Reger-Nash?

17 LAW CLERK:

18 Chairman, can you say his name one more
19 time? He is supposed to be on the video call, but I
20 cannot tell from some of these ID's if he's one of them.

21 CHAIR:

22 Bill Reger-Nash?

23 LAW CLERK:

24 I will call him if you want to go on to
25 the next.

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CHAIR:

Okay. Margot Saunders?

MS. SAUNDERS:

Good morning. Madam Chair, can you hear me? Can you hear me all right?

CHAIR:

Could you get closer to your microphone, please?

MS. SAUNDERS:

Yes. Is this better? Can you hear me? Can you hear me?

CHAIR:

No. It's still not very clear.

MS. SAUNDERS:

I'll speak up. That's all I can do.

CHAIR:

Okay.

MS. SAUNDERS:

Can you hear me now? All right. Madam Chair Lane, Commissioner Larrick, Commissioner Raney, my name is Margot Saunders, M-A-R-G-O-T, S-A-U-N-D-E-R-S. I'm an attorney with the national consumer law clinic, a national non-profit legal services program that advocates for low-income people in this state and other states ---. I'm also a resident of Hurricane, West Virginia and an

1 AEP customer. I appreciate the opportunity to make
2 comments this morning on the impact the proposed rate
3 increases on low-income ratepayers in West Virginia. I'm
4 here today representing clients at 15 West Virginia
5 national organizations I've detailed in the letter that I
6 filed yesterday.

7 There are two main reasons that we
8 would reject the Company's request that require that the
9 ratepayers in West Virginia bear all the cost of the
10 environmental measures necessary to keep the plants open
11 past 2028. Cost of value and fundamental bearing. These
12 are essential things to consider that ratepayers only be
13 required to pay fair costs and receive the service
14 actually provided to those ratepayers. But in this case,
15 the Companies are requesting that the West Virginia
16 ratepayer pay the cost of service provided to ratepayers
17 in other states, even after the regulatory provided for
18 those states determined that it was not good policy for
19 that to happen. Let me give you an example. Why don't
20 you suppose three people decide to lunch together, but
21 two people --- two of those refuse to pay for lunch
22 leaving just one person to cover the costs of all three
23 lunches. Manageable cost of lunch for one person paying
24 for all three does not likely have little impact on that
25 person's life. But if the cost of that lunch represented

1 five or six person of that person's own income and their
2 income was small to begin with, that one extra lunch can
3 likely make a big difference to the person who had to pay
4 for the other person's meal. The extra \$50 a year to
5 these people to charge for West Virginia ratepayers on
6 this proposal will have a significant actual difference
7 to the
8 low-income West Virginians who would have to pay it. To
9 them, the cost to fix their households would be ---.
10 Some sick seniors would not be able to purchase anything
11 in addition for someone. Some households would not be
12 able to afford their electric bill. Some would have to
13 go without heat. Or water. The Companies are asking that
14 West Virginia ratepayers would have to pay for this
15 utility service month after month, year after year. In
16 addition to the --- 60 percent in the past ten years.
17 According to the DOW website, AEP made have left off
18 after expense of taxes of 2.2 billion dollars last year.
19 If you choose to keep these coal plants open after 2028,
20 --- West Virginia ratepayers with the associated cost.
21 Instead, its shareholders should be responsible for these
22 costs. It's the same principle as treating two friends
23 for lunch. Thank you.

24

CHAIR:

25

Thank you. Delegate Reynolds?

1 MR. REYNOLDS:

2 Good morning. Thank you for letting me
3 be here and the chance to speak. I'm Charlie Reynolds,
4 Marshall County, Fourth District, C-H-A-R-L-I-E,
5 R-E-Y-N-O-L-D-S. I am part of that age group of 50 and
6 above and it would be hard if utility rates go up but I'm
7 going to support it. The reason I'm going to support it
8 is I do believe that without anything in place to take up
9 and give us the energy that those plants provide, it's
10 just an attack on our energy grid. So I'm against closing
11 those plants. Not counting the job loss, the financial
12 breakdown to Marshall County. So I need those plants to
13 stay open. It would be hard, and I agree, rates will go
14 up, but so has inflation by seven percent. So I ask
15 please leave the plants open. That's all I have to say
16 about it.

17 CHAIR:

18 Thank you, Mr. --- thank you, Delegate
19 Reynolds. Wes Holden.

20 MR. HOLDEN:

21 I'd like to take this time to thank the
22 Commission for allowing a public comment period. My name
23 is Wesley, W-E-S-L-E-Y, H-O-L-D-E-N. The top priority
24 for the West Virginia Public Service Commission should be
25 to protect the consumers interest and not to placate the

1 coal lobby which is clinging to visions of past work.
2 One thing is for sure, a decision for a \$448,000,000 rate
3 increase will not bring back coal. You're worried about
4 coal jobs. Where will we be 40 years from now? West
5 Virginia consumers must not be held liable as a result of
6 the decisions made by the state utility regulators of
7 Kentucky and Virginia when they deny the request to
8 approve the environmental upgrades for an expanded use of
9 coal. They saw it as a boondoggle that would only
10 benefit coal corporations and its shareholders.

11 I am here today because my conscience
12 compels me to be nowhere else. My conscience compels me
13 to speak up on behalf of the West Virginia consumer.
14 When the public utility presents a rate increase that is
15 against the common right and reason, it is up to the
16 Public Service Commission to deny such a request as being
17 without merit. And just what is the issue that should be
18 decided here this morning? Should West Virginia
19 consumers be forced to pay for upgrades at antiquated
20 power plants? Why should West Virginia consumer pay for
21 millions of dollars on upgrades when two other states,
22 Kentucky and Virginia already denied these upgrades on
23 the grounds that they were uneconomical? Think about it.
24 Kentucky is a coal state and they saw the project as
25 unfeasible. The real issue here this morning is whether

1 to allow coal corporations and the shareholders to
2 continue to exploit West Virginians. So the bottom line
3 issue be coal jobs? Don't make me laugh. Coal mining
4 today is highly automated. The jobs are not there
5 anymore. West Virginia has overwhelmingly moved from
6 mining coal. The due process causes of the United States
7 Constitution requires judges to recuse themselves when
8 there's a high probability that the judge's decision will
9 be biased. Commissioner Bill Raney should recuse himself
10 from making a decision in this case because of his past
11 position of being president of the West Virginia Coal
12 Association. I feel there's a higher probability of
13 biasness if he issues a decision.

14 CHAIR:

15 Mr. Holden?

16 MR. HOLDEN:

17 Yes.

18 CHAIR:

19 I think that's an inappropriate remark.

20 MR. HOLDEN:

21 Okay. Let's strike that from the
22 record.

23 CHAIR:

24 Thank you.

25 MR. HOLDEN:

1 A decision in favor for the rate
2 increase would be a mockery of the Public Service
3 Commission's responsibility to the West Virginia
4 consumer. And I ask the Public Service Commission to
5 please do not support to the boondoggle for a mostly out
6 of state coal corporations. Thank you again, Commission.

7 CHAIR:

8 Thank you. Mr. Bryant?

9 MR. BRYANT:

10 Thank you, Madam Chairman and members
11 of the Commission. My name is Perry Bryant, P-E-R-R-Y,
12 B-R-Y-A-N-T. I'm a founder of the West Virginia Climate
13 Alliance. We're a broad-based coalition of environmental
14 based civil rights and civic organizations working
15 together on efforts to address climate change. I think
16 we've all seen, witnessed the impacts of climate change,
17 witnessed the wildfires out west or the hurricanes that
18 grow in intensity as they move across an ever-increasing
19 waters in the gulf. As a gardener, I see much more ---
20 like many West Virginians, I see much more subtle forms
21 of changes in our climate. We see a more shallow winter
22 that doesn't kill off insects and garden pests. I see a
23 growing season that starts the last frost earlier and
24 earlier in the year, and the first --- the last frost.
25 And the frost in the fall is later and later in the year.

1 We all know that the climate is changing and I think in
2 our hearts, we understand that climate change is going to
3 be addressed. And particularly, reducing carbon dioxide
4 emission is a long-lived task that's been around for
5 hundreds of years, if not in fact, centuries. So what we
6 do today is going to impact the environment and the
7 climate for years to come, not just for our time, for our
8 children, and their children, and their children's time.

9 I think there's a real good chance that
10 you may disagree with me about the importance of
11 addressing climate change and that may have led you to a
12 decision to grant the request in the earlier hearing that
13 approved \$380,000,000 in these three uneconomical power
14 plants. And if you approve the request that AEP
15 affiliates are requesting today, it will be just shy of a
16 half a billion dollars invested in these three plants.
17 It's very unlikely that these plants will survive until
18 2040. Sooner or later, they're going to become stranded
19 assets and AEP affiliates that are here today will come
20 back before this Commission basically saying we made bad
21 decisions in the past. We need a bailout. We need
22 somebody to bail us out. And that somebody is likely to
23 be ratepayers.

24 Now, it's one thing for AEP to say
25 we're willing to take stockholders' money and invest in

1 these, make this better on these risky plants. It's
2 another to come and say we want ratepayers to pay for
3 this, these what are very, very likely to become stranded
4 assets. So I think it's important for you to make sure
5 that we're not going to throw good money out the bat and
6 that those who are going to, that AEP stockholders'
7 monies make these investments and not the ratepayers.

8 Now, regarding coalminers and plant
9 operators, we are prepared to work with them to transfer
10 to a cleaner electricity source of electricity. I want
11 to make clear. They have powered this country for more
12 than a generation. We owe them a huge debt of gratitude.

13 There are ways that we can support them other than
14 prolonging the lives of these plants. For example,
15 Senator Manchin has the 48C legislation \$4,000,000,000 of
16 investment in tax credits for clean manufacturing
17 targeted to zip codes where mines have been closed or
18 plants have been earlier retired. We support the
19 abandoned mine land programs that are being reauthorized
20 in Congress today that will create thousands of clean
21 jobs cleaning up the legacy of coal operations in the
22 past, and will also plug oil and gas wells. We support
23 economic development programs and realistic job training
24 programs. I know that many who were involved in the
25 industry will look at it as the enemy, as us as the

1 enemy. We are not. We sincerely appreciate the
2 sacrifices that they have made and we're going to make
3 every effort to make sure that they're lives, that
4 they're not just left behind, that their lives are
5 actually improved after we transition to a new economy.
6 Thank you very much, Madam Chairman. I appreciate your
7 time.

8 CHAIR:

9 Thank you, Mr. Bryant. Pam Garrison.

10 MS. GARRISON:

11 Good morning, everyone. My name is Pam
12 Garrison, G-A-R-R-I-S-O-N. I'm a Fayette County resident
13 and I'm a member of the West Virginia Poor People's
14 Campaign. I stand here before you representing 710,000
15 low wage poor people in West Virginia. We struggle. And
16 during this pandemic, we were the essential workers.
17 We're the ones that have to go out there sick no matter
18 what because we can't afford to stay home. We can't
19 afford to be sick. During this pandemic, we have seen
20 the utilities, especially the power companies where
21 everybody's had to go virtual, stay home, our schools.
22 We've seen them make record profits in this past year.
23 I've seen they pay very little in taxes because of the
24 tax brackets they're in, but yet we can't get a minimum
25 wage raise. We have had no minimum wage raise in almost

1 13 years. Our people are struggling. We are one of the
2 poorest states in the nation. We just saw a bunch of our
3 utilities in a 14.4 percent rate increase on us. We're
4 facing winter. Most of us are looking at \$3 and \$400
5 heating bills in the winter time. We just saw the power
6 companies get boocoos of subsidies from the government to
7 help people through this pandemic. We're looking at
8 winter again. \$50 might not seem like a lot to some
9 people, but when you work for minimum wage and you have
10 to work 63 hours a week just to afford a two bedroom
11 home, \$50 means your kids food. It means your medicine.

12 Our social security SSI nothing has gotten any kind of
13 increases or raises that is substantial enough to help
14 any of us elderly people. And our state is one of the
15 most elderly areas. We're looking at poor elderlies where
16 we go. We can't afford to be strapped with the overhead
17 of these corporations and pay our fair share of our bills
18 and what we are using. Fair is fair. If they want to
19 make their places better, then take the billions of
20 profits that they have been making into it. Don't put it
21 on the backs of the poor. Thank you and please, please,
22 think about people, poor people in your minds when you're
23 making these decisions. They're not the billionaires.

24 CHAIR:

25 Thank you, Ms. Garrison. Joanna Bailey

1 or Johna Bailey?

2 LAW CLERK:

3 Chairman, I'm not sure she's on the
4 conference.

5 CHAIR:

6 Okay. Let's then go back to Dr. Bill
7 Reger-Nash.

8 LAW CLERK:

9 Ask him to unmute himself.

10 CHAIR:

11 Excuse me?

12 LAW CLERK:

13 Unmute.

14 CHAIR:

15 Okay.

16 MR. REGER-NASH:

17 This is Dr. Bill Reger-Nash.

18 CHAIR:

19 Could you speak into your microphone,
20 please?

21 MR. REGER-NASH:

22 Dr. Bill Regar-Nash. Can you hear me?

23 CHAIR:

24 Speak into your microphone, please.

25 MR. REGER-NASH:

1 I'm speaking into my microphone.

2 CHAIR:

3 Okay.

4 MR. REGER-NASH:

5 Can you hear me?

6 CHAIR:

7 Yes.

8 MR. REGER-NASH:

9 Can you hear me?

10 CHAIR:

11 Yes.

12 MR. REGER-NASH:

13 My name is Dr. Bill Reger-Nash. I'm a
14 former delegate from --- and ---.

15 CHAIR:

16 No. You're not --- you're breaking up.

17 MR. REGER-NASH:

18 Unfortunately, this is because ---
19 because of our lack of investment in the future of West
20 Virginia and this is ---. I apologize ---. Because of
21 our --- of West Virginia ---. I apologize ---

22 CHAIR:

23 Mr. Reger-Nash, use the --- we're
24 having a hard time understanding you. You can use the
25 call-in number if you want.

1 MR. REGER-NASH:

2 Okay. I'll do that.

3 LAW CLERK:

4 It's in the same link. It's in the
5 link I sent him.

6 CHAIR:

7 It's in the link that we sent to you.

8 LAW CLERK:

9 Okay, Chairman. He's back.

10 MR. REGER-NASH:

11 This is Bill Reger-Nash.

12 LAW CLERK:

13 He's back in.

14 MR. REGER-NASH:

15 Dr. Bill Reger-Nash.

16 CHAIR:

17 Okay. Proceed.

18 MR. REGER-NASH:

19 Okay. Apologies. Living in rural
20 Monongahela County, our internet service is very spotty
21 at best, and so I apologize. This is a case of not
22 investing in the future of West Virginians. I'm a
23 resident of Mon County presently. I used to be a
24 delegate representing Wheeling, Ohio County. And I would
25 just like to make a statement that we should be investing

1 in the future of West Virginia with an investment in
2 renewables so that West Virginians can breathe more
3 easily with cleaner air and we would rather not subsidize
4 integrated power plants that continue to pollute us and
5 strangle us with our air. Also, they are eating out
6 additional dollars in profit. I strongly oppose this
7 rate increase on the backs of West Virginians. And I
8 thank you for this opportunity to speak and I thank all
9 the other who have spoke in opposition to this rate
10 increase. Thank you.

11 CHAIR:

12 Thank you, Dr. Reger-Nash. Next, we
13 have Kris Olsen.

14 MS. OLSEN:

15 Good morning. Thank you for having me.
16 My name is Kristen Olsen, O-L-S-E-N, and I'm an AEP
17 customer, a teacher, and a single mother. I'd like to
18 thank you for this opportunity to express my concern for
19 myself on behalf of my fellow West Virginians footing the
20 bill for large corporations. It's not fair to keep open
21 an outdated coal power plant. It makes no sense that
22 West Virginia ratepayers pay for all these costs. I
23 should only be required to pay the actual cost for my
24 power services that I receive. Like many of my fellow
25 West Virginians, I live on a tight budget and raising my

1 power bill would take food out of my children's mouths. I
2 can barely afford to pay my utility bills as it is and
3 this is not fair. I work hard. Why should I suffer to
4 give these companies a break to keep open an outdated
5 coal power plant? I urge you to take the time to hear
6 from more people in positions as I am and to hold at
7 least one more public hearing at a time that people with
8 jobs can express how this is impacting us. I took the
9 day off to be here at 8:00 a.m. on a Friday. Most people
10 need to be at work and can't take a day off to express
11 how this is going to impact their day-to-day lives. This
12 decision cannot --- this decision needs to take into
13 account people like me, you know, single moms that can't
14 afford to take extra money out of our pockets every
15 month. This would impact my life and I don't hear a lot
16 of people here this morning that would be directly
17 impacted. And I know that if they were aware of this
18 hearing and able to be here that they would be here
19 saying that I'm saying to you right now. Please consider
20 our West Virginia children, our West Virginia children.
21 People consider women like me that are struggling to
22 survive as it is and please don't allow them to increase
23 my power bill. Thank you.

24 CHAIR:

25 Thank you, Ms. Olsen. Next, we have

1 Daniel Hudson.

2 LAW CLERK:

3 Chairman, I'm not sure he's on the
4 video conference either. I'll call him.

5 CHAIR:

6 Okay. Is Johna Bailey?

7 LAW CLERK:

8 She will not be available.

9 CHAIR:

10 Okay. Okay. Stephanie Hysmith.

11 MS. HYSMITH:

12 Good morning. My name is Stephanie
13 Hysmith. Stephanie is S-T-E-P-H-A-N-I-E. Hysmith is
14 H-Y-S-M-I-T-H. Thank you for this opportunity for me to
15 speak.

16 I have been living here, I've been
17 living in West Virginia for about 9 years or 11 years.
18 We bought the house quite a while ago, but we took our
19 time to move back down here from Ohio. So I've gotten to
20 know a lot of West Virginia and I'm very concerned about
21 this extending the life of these power plants that should
22 be allowed to die a dignified death. I empathize with
23 Ms. Bryant from the Poor People's Campaign because I am
24 pretty well educated, but I've never made a lot of money
25 and I have something I wanted to show you, this is kind

1 of a show and tell. These are budget sheets. I've been
2 keeping these since the 1990's or earlier when I was
3 making so little money at a job I loved that 50 percent
4 of my income could not pay my rent. And I called my
5 mother one time. I said mom, I've got \$11.33 to live on
6 for the month and she said what are you doing with all
7 your money. I'm like I don't have any, you know. And so
8 I started keeping these budget sheets just to have some
9 idea of how much money I had going out every month. And
10 so I just kept this. And so I looked back and thought
11 what was I paying back here in 2011. My power bill in
12 2011 here in Charleston in July was \$79. I had gone on a
13 budget plan because I had, the previous year I had some
14 bills where it was over \$200 or more. I thought I need
15 to go on the budget plan. So I went on a budget plan,
16 paid \$79, \$78, \$80 a month. I'm now paying \$170. That's
17 \$100 more a month. That's \$1,200 a year or more. That's
18 sizable. And I wouldn't mind paying that extra money if
19 I knew that AEP was sourcing its power from renewable
20 energy. And the fact that they want to raise the rates -
21 -- I mean, I'm very easy we keep our thermostat at a
22 reasonable temperature. I don't run it all the time. We,
23 you know, try to turn it off and open up windows, but
24 it's hot and it's getting hotter and everybody knows it.
25 Everybody in the world is looking at what's going on to

1 our earth. We're burning down trees. They can't capture
2 carbon anymore. They're dead. It's crazy. I mean, you
3 look at the wildfires. You look at Seattle, Portland,
4 Oregon how the temperatures of 118 degrees. That's
5 insane. And the thing is when it's so hot, you know,
6 people in the Northwest, they don't have air
7 conditioning. They didn't need it. Now, they're
8 desperate. And what's going to happen to us? I mean,
9 we're --- you know, we have to have air conditioning. If
10 you don't have air conditioning, you know, you suffer.
11 You suffer from heat. And there are people who are dying
12 from the heat and it's only going to get worse. And I
13 think we need to take the time to say okay, we're going
14 to let these coal-fire power plants die a dignified death
15 and we're going to renew the initiatives of the people in
16 the state are showing to develop wind and solar power and
17 bring West Virginia into the 21st century. Thank you.

18 CHAIR:

19 Thank you. That brings us to the end
20 of everybody that signed up. Are there people in the
21 audience that didn't sign up that wish to make a
22 statement? So I made a mistake. Hannah King?

23 MS. KING:

24 Hello. Good morning. My name is
25 Hannah King and you spell that H-A-N-N-A-H, K-I-N-G. And

1 I am here to speak on behalf of the West Virginia
2 Environmental Council. I'm also here to speak on behalf
3 of a few of my close friends and my family who are also
4 AEP ratepayers and cannot be here this morning. Within
5 the last 15 years, AEP has reduced their residential
6 electricity rates by 150 percent. In the next 19 years,
7 ratepayers will face another increase, which is keeping
8 the older and expensive Mitchell plant open until 2040.
9 As West Virginia ranks second in the country to the
10 lowest median household income, ratepayers cannot afford
11 and do not deserve to bear the costs of this heavy and
12 irresponsible increase, let alone cover the burden of
13 Virginia and Kentucky customers who will not be paying
14 their share. We must plan for the future and prepare for
15 an economic transition for these communities. Please
16 reject the rate increases and do not place the costs to
17 the ratepayers in other jurisdictions on the backs of
18 West Virginians. We deserve better. Thank you for the
19 opportunity to speak today.

20 CHAIR:

21 Thank you, Ms. King. All right. I
22 will renew my request for observation. Are there people
23 in the audience that did not sign up that wish to make a
24 statement?

25 If not, then thank you for your

1 interest in taking time to participate in this Commission
2 proceeding. The evidentiary hearing on the petition to
3 reopen will be held at 9:30 and the evidentiary hearing
4 may be viewed from the link on our website,
5 www.psc.state.wv.us. The Commission will continue to
6 receive written public comments in these cases on its
7 website and at the following address, Public Service
8 Commission of West Virginia Executive Secretary, 201
9 Brooks Street, Charleston, West Virginia, 25301.

10 We are adjourned and we will be back at
11 9:30 for the evidentiary hearing. Thank you all for your
12 interest and we will see you in a little bit. Thank you.

13 * * * * *

14 HEARING CONCLUDED AT 8:55 A.M.

15 * * * * *


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CERTIFICATE

I hereby certify, as the stenographic reporter,
that the foregoing proceedings were taken
stenographically by me, and thereafter reduced to
typewriting by me or under my direction; and that this
transcript is a true and accurate record to the best of
my ability.

Dated the 1 day of October, 2021


Jennifer Wilson,
Court Reporter

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

* * * * *

IN RE: APPALACHIAN POWER COMPANY*

AND WHEELING POWER COMPANY * 20-1040-E-CN

*

* * * * *

HEARING TRANSCRIPT

* * * * *

BEFORE: CHARLOTTE LANE, Chairman

RENEE A. LARRICK, Commissioner

WILLIAM RANEY, Commissioner

HEARING: Friday, September 24, 2021

9:32 a.m.

LOCATION: PSC Howard M. Cunningham Hearing Room

201 Brooks Street

Charleston WV

Reporter: Jennifer Wilson

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A P P E A R A N C E S

WENDY BRASWELL, ESQUIRE

LUCAS HEAD, ESQUIRE

Public Service Commission of West Virginia

201 Brooks Street

Charleston, WV 25301

Counsels for the PSC

ANNE C. BLANKENSHIP, ESQUIRE

Robinson & McElwee, PLLC

700 Virginia Street, East

Suite 400

Charleston, WV 25301

Counsel for Appalachian Power Company and Wheeling

Power Company

BARRY A. NAUM, ESQUIRE

Spilman, Thomas & Battle

1100 Bent Creek Boulevard

Suite 101

Mechanicsburg, PA 17050

Counsel for the West Virginia Energy Users Group

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ROBERT WILLIAMS, ESQUIRE
HEATHER OSBORN, ESQUIRE
Consumer Advocate Division
Public Service Commission of West Virginia
300 Capitol Street
Suite 810
Charleston, WV 25301
Counsels for the Consumer Advocate Division
J. MICHAEL BECHER, ESQUIRE
Appalachian Mountain Advocates
P.O. Box 507
Lewisburg, WV 24901
Counsel for the Sierra Club
EMMETT PEPPER, ESQUIRE
West Virginia Citizen Action Group
1500 Dixie Street
Charleston, WV 2511
Counsel for the West Virginia Citizen Action Group,
EEWV, SUN

1 A P P E A R A N C E S (Cont.)

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JACOB ALTMAYER, ESQUIRE
H. BRANN ALTMAYER, ESQUIRE
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 14th Street
Wheeling, WV 26003
Counsels for the WV Coal Association

JAMES R. BACHA, ESQUIRE
American Electric Power Service Corp.
1 Riverside Plaza
P.O. Box 16631
Columbus, OH 43215
Counsel for Appalachian Power Company and Wheeling
Power Company

KEITH D. FISHER, ESQUIRE
500 Lee Street East
Suite 800
Charleston, WV 25301
Counsel for the AEP and West Virginia Power Company

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A P P E A R A N C E S

SHANNON FISK, ESQUIRE

RAGHU MURTHY, ESQUIRE

Earth Justice

1617 JFK Boulevard

Suite 1130

Philadelphia, PA 19103

Counsels for the CAG

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P R O C E E D I N G S

-

CHAIR:

Good morning. I'm Charlotte Lane, Chairman of the Public Service Commission of West Virginia. With me are Commissioner Renee Larrick and Commissioner William Raney. We are here today to conduct an evidentiary hearing on requests made in a Petition to Reopen in Case Number 20-1040E-CN, Appalachian Power Company and Wheeling Power Company.

On August 4, 2021 the Commission granted a Certificate of Convenience and Necessity to Appalachian Power Company and Wheeling Power Company to make internal modifications at the Amos, Mountaineer and Mitchell coal fired generating plants to keep those plants open until 2040. These modifications are necessary to comply with federal environmental regulations.

The Commission also authorized cost recovery for the project through a surcharge. The Companies estimated during the original case that the investment for alternative one would be \$250,000,000 by APCo and Amos and Mountaineer, and \$67,000,000 by Wheeling Power for its 50 percent share at Mitchell, for

1 a total of \$317,000,000 to be funded through internal
2 financing.

3 On September 8th, 2021, the Companies
4 filed a Petition to Reopen and to take further action in
5 this case. Because the Virginia State Corporation
6 Commission, Kentucky Public Service Commission have ---
7 which have interest in Amos and Mountaineer and Mitchell
8 respectively denied the Companies' proposal to complete
9 all environmental modifications and keep the plants open
10 until 2040. The Companies now request that this
11 Commission approve the costs of the entire project.
12 Several parties filed responses to the Petition to
13 Reopen. At this time, let's take appearances for the
14 parties. APCo and Wheeling Power?

15 ATTORNEY BLANKENSHIP:

16 Good morning, Commissioners, and thank
17 you. My name is Anne C. Blankenship. I'm with the law
18 firm of Robinson & McElwee, PLLC, and I'm here on behalf
19 of Appalachian Power Company and Wheeling Power Company.
20 And also with me on behalf of the Companies are James R.
21 Bacha and Keith D. Fisher. I'll also take this
22 opportunity to let the Commissioners know that it's our
23 understanding we've heard that the public notices have
24 all been published. We don't have the Affidavits of
25 Publication quite yet, but we will file them as

1 appropriate when we receive them. Thank you.

2 CHAIR:

3 WVEUG?

4 ATTORNEY NAUM:

5 Yes. Thank you, Madam Chairman,
6 Commissioners. Barry Naum, from the law firm Spilman,
7 Thomas & Battle, PLLC. I represent the West Virginia
8 Energy Users Group for the purposes of this case.
9 WVEUG's membership continues to consist of the Chemours
10 Company, LLC; Constellium Rolled Products Ravenswood,
11 LLC; Eagle Natrium Westlake; Marathon Petroleum Company,
12 LP; MarkWest, and WVA Manufacturing, LLC.

13 CHAIR:

14 Consumer Advocate?

15 ATTORNEY WILLIAMS:

16 Thank you, Madam Chair. My name is
17 Robert Williams and I'm here on behalf of West Virginia
18 Public Service Commission Consumer Advocate Division.
19 And with me today also is Heather Osborn.

20 CHAIR:

21 I don't see her. Sierra Club?

22 ATTORNEY BECHER:

23 Thank you. My name is Mike Becher,
24 Appalachian Mountain --- from Appalachian Mountain
25 Advocates, representing the Sierra Club.

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CHAIR:

CAG, SUN, and EEWV.

ATTORNEY PEPPER:

Good morning. Can you hear me okay
this time?

CHAIR:

Speak a little bit better into the
microphone.

ATTORNEY PEPPER:

I will try. Can you hear me better
now?

CHAIR:

Yes.

ATTORNEY PEPPER:

Okay. Thank you. Good morning,
Chairman Lane, Commissioner Larrick and a very special
welcome to Commissioner Raney. I'd say it's good to see
you, but I can't see you. So hopefully we'll be there
in person ---. And thank you to the Commission for
permitting remote participation, because I do have a
family member that can't be vaccinated.

My name is Emmett Pepper. I'm
representing --- I'm here on behalf of West Virginia
Citizen Action Group, Solar United Neighbors and Energy
Efficient West Virginia. Co-Counsels today are Shannon

1 Fisk and Raghu Murthy, who also appear remotely. We
2 have an extra witness, Jim Wilson, who will appear
3 remotely this afternoon. Thank you.

4 CHAIR:

5 West Virginia Coal Association?

6 ATTORNEY JACOB ALTMAYER:

7 Good morning, Chairman Lane. Jake
8 Altmeyer here from the law firm of Philips, Gardill,
9 Kaiser & Altmeyer in Wheeling. Co-Counsel Brann
10 Altmeyer, on behalf of the West Virginia Coal
11 Association. Are you able to hear us fine?

12 CHAIR:

13 You're going to have to speak up.

14 ATTORNEY JACOB ALTMAYER:

15 Okay. Is that better?

16 CHAIR:

17 Yes.

18 ATTORNEY JACOB ALTMAYER:

19 Okay.

20 CHAIR:

21 And Staff?

22 ATTORNEY JACOB ALTMAYER:

23 Jacob Altmeyer from the law firm of
24 Phillips, Gardill, Kaiser & Altmeyer in Wheeling and
25 co-counsel Brann Altmeyer, on behalf of the West

1 Virginia Coal Association.

2 CHAIR:

3 Staff?

4 ATTORNEY BRASWELL:

5 Good morning, Chairman and
6 Commissioners. Wendy Braswell and Lucas Head of the
7 Commission Legal Division appearing on behalf of
8 Commission Staff.

9 CHAIR:

10 Okay. Please check your cell phones
11 and make sure they're turned off. And when you speak,
12 make sure you speak into the microphone. And when you
13 speak, you can take off your masks, so it'll be easier
14 for us to hear.

15 Prefiled and marked testimony of Mr.
16 Spitznogle and Mr. Short will be admitted into the
17 record, unless there is an objection. All other
18 evidence can be moved into the record at the appropriate
19 time. So the order of witnesses are Mr. Spitznogle and
20 then Mr. Short. So Ms. Blankenship, do you want to call
21 your first witness?

22 ATTORNEY BLANKENSHIP:

23 Yes. Thank you, Your Honor. The
24 Companies call Gary Spitznogle.

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GARY SPITZNOGLE, HAVING FIRST BEEN DULY SWORN, TESTIFIED
AS FOLLOWS:

DIRECT EXAMINATION
BY ATTORNEY BLANKENSHIP:
Q. Good morning, Mr. Spitznogle.
A. Good morning.
Q. Could you please state your name and business
address for the record?
A. Yes. It's Gary Spitznogle at 1 Riverside
Plaza, Columbus, Ohio, 43215.
Q. And by whom are you employed and in what
capacity?
A. I'm employed by American Electric Power. I'm
Vice President of Environmental Services.
Q. Did you file Direct Testimony in this
proceeding consisting of nine pages of questions and
answers marked as Company Exhibit GOS?
A. Yes, I did.
Q. And did you also file Supplemental Direct
Testimony on September 8th, 2021, as part of the
Companies' Petition to Reopen and take further action?
And did that testimony consist of five pages of
questions and answers labeled as Company Exhibit GOS-SD?

1 A. Yes, I did.

2 Q. Do you have any additions, deletions or
3 corrections to make?

4 A. In reviewing it recently, I found a few
5 corrections I'd like to make.

6 Q. If you could go through those for us, please.

7 A. Okay.

8 So the first correction is on page four on line
9 ten. There's a couple of dates in that sentence,
10 June 30th, 2023 and June 1st, 2022. That June 1st date
11 should actually be May 31st of 2022.

12 Q. Okay.

13 A. The same correction on page five, line ten as
14 well, the June 1st date should be replaced with May
15 31st.
16 And in addition to that, a couple of typos on that. On
17 page five, line five, after the words December 31st,
18 2028, cross out the word and. And then on the following
19 line, the second to last word on line six, the word is
20 should be deleted. And then finally on line seven after
21 the first word of line seven, Companies, I've added, for
22 additional clarification, the following words to insert
23 at that point; do not file a notice by October 13th,
24 2021 and.

25 Q. Okay.

1 And just for clarity sake, can you just read
2 that full sentence now the way that you would like it to
3 be?

4 A. Yes. It starts on line six. But the Companies
5 do not file a notice by October 13th, 2021 and later
6 decide not to complete the ELG compliance improvements
7 for some maintenance, the Companies will be required to
8 cease coal operations at those units by each unit's ELG
9 compliance deadline.

10 Q. Are there any other corrections?

11 A. Not for that document, no.

12 Q. Do you adopt the supplemental testimony as part
13 of your evidence in this case?

14 A. Yes, I do.

15 Q. Are you familiar with the Companies' reply with
16 responses to the Petition to Reopen filed on September
17 20th?

18 A. Yes, I am.

19 Q. And Exhibit A that's attached?

20 A. Yes.

21 Q. And did you contribute to the preparation of
22 that exhibit?

23 A. Yes, I did.

24 Q. Do you have any additions, deletions or
25 corrections to make to that?

1 A. Yes. There is one word I would like to change.

2 Q. Okay.

3 A. And on that exhibit, there are different color
4 boxes and diamonds in the flow chart. Referring to the
5 white box with the red border around it at the bottom of
6 the page, towards the right side, which has the sentence
7 retire or refuel plants by earliest applicable
8 compliance date ending on time at which progress starts.
9 And that final word starts should be stops.

10 Q. Any other deletions or corrections?

11 A. No, ma'am.

12 ATTORNEY BLANKENSHIP:

13 Your Honor, if the Commission would
14 allow, it might be helpful, since Mr. Spitznogle
15 prepared this exhibit and it looks a little bit
16 complicated, if you would like, he could do a brief
17 summary before he's subject to Cross Examination of the
18 exhibits, and just go over what it contains.

19 CHAIR:

20 Yes. That's acceptable.

21 ATTORNEY BLANKENSHIP:

22 Thank you.

23 BY ATTORNEY BLANKENSHIP:

24 Q. Mr. Spitznogle, would you mind doing that for
25 us?

1 A. Yes. So this chart is a graphical attempt to
2 simplify a complicated decision tree that has to be done
3 and a final decision has to be made on 10/13 of 2021.
4 The rules are very complex, so this graphic helps to
5 make it simpler to understand. And what it's showing
6 here on this picture are four different scenarios that
7 are possibilities in the ELG and some of them in the CCR
8 rule.

9 CHAIR:

10 Mr. Spitznogle, explain to me again
11 what this chart is.

12 A. Here's what it looks like. It's in the ---.

13 ATTORNEY BLANKENSHIP:

14 It's Exhibit A to the Companies'
15 responses or reply to the responses to the Petition to
16 Reopen for further action. It was filed on September
17 20th. The colored chart that has different colored
18 boxes, two pages ---.

19 ATTORNEY BRASWELL:

20 Chairman, I guess this is a question
21 for the Chairman and Ms. Blankenship. Right now that
22 hasn't been admitted into evidence. I'm assuming that
23 Ms. Blankenship is walking Ms. Spitznogle through this
24 so they can ask to have it provided as an exhibit. If
25 they are, I don't have any objection to that, that it's

1 not in evidence yet.

2 CHAIR:

3 Okay. Thank you.

4 A. Again, I heard that maybe my mic isn't on. I
5 think we've got it on now. Are you having any trouble
6 hearing me? Is anybody having any trouble hearing me?

7 CHAIR:

8 No. I can hear you plain. Thank you.

9 A. Okay. So the picture, Exhibit A, is a
10 graphical attempt to give clarity to the decision that
11 must be made on 10/13 of this year. The color coding
12 are the different scenarios or options that are
13 available to us at different periods of time. So
14 looking across the top, the blue that is the CCR-only
15 option. The yellow portion is a decision to move away
16 from that option sometime after 10/13. The green is the
17 CCR plus ELG option. And the white portion is a
18 decision sometime after 10/13 to change paths away from
19 the CCR plus ELG options.

20 So if we follow this chart from the decision on
21 10/13 to the right, follow that diamond over towards the
22 right, to not file an N-O-P-P or a NOPP, which is the
23 ELG opportunity path by 10/15 of 2021 in order to
24 retire the unit, versus pursue the CCR plus ELG path
25 that we have filed with the EPA and with the West

1 Virginia DEP.

2 BY ATTORNEY BLANKENSHIP:

3 Q. Mr. Spitznogle, I'm going to interrupt you just
4 for a second. For those who don't have this exhibit in
5 color, when you describe it, can you also describe which
6 box you're referring or diamond you're referring to?

7 A. Yes, yes. Thank you for pointing that out. So
8 the first path I want to take is --- the boxes down the
9 right-hand side of the sheet and the color. And that is
10 the option to continue with the filings we've made
11 through EPA and West Virginia DEP and not file a NOPP to
12 modify that position. And in that case, as you follow
13 the boxes down, do not file a NOPP is followed by
14 continue to progress on the projects with the --- the
15 treatment system, and all the way to the bottom on that
16 is --- you're able to continue to operate beyond 2028.

17 If you take the left out of that second box, it
18 says continue progress and move over to the diamond.
19 It's a choice at some point after making this filing to
20 cease progress towards CCR or ELG compliance. And at
21 that point, once you cease progress, you'd have to
22 retire or refuel the plant the earliest applicable
23 compliance date. And those really depend on when you've
24 chosen to stop.

25 So that's really a decision to stop work and

1 retire the power plant. So that covers the right-hand
2 side of the picture. On the left side is the option to
3 file the NOPP with the West Virginia DEP, which says we
4 want to instead of pursue CCR plus ELG, instead pursue
5 the CCR-only option with the intent to retire the unit
6 or refuel by the end of 2028.

7 So that's the blue path or the boxes clear on
8 the left side is the path for that. You file the NOPP
9 on or before 10/13 of '21. And then you move through
10 the project to be completed by the allowed permit dates
11 and CCR date that's created by the EPA to complete those
12 projects. And you can continue operating the power
13 plant beyond the end of 2028.

14 And then if you look branching off from that
15 second box to the diamond, which is yellow for those who
16 have color sheets, that's the decision to reverse the
17 commitment to retire sometime after the NOPP is filed on
18 10/13. And the reason that this is really the primary
19 reason we're showing this diagram is to show the
20 complexity and the difficulty with taking that path.

21 Yes, the rule allows for it, but in order to
22 achieve that, there's an awful lot of difficulty.
23 There's risk associated with taking that path. So I'll
24 step you through what that path means.

25 As you recall, we filed a NOPP on 10/13,

1 committing to retire the unit by the end of 2028 and
2 then take this path to withdraw that commitment to
3 retire and instead pursue what the EPA has provided in
4 the ELG rule, which is an option to pursue what they
5 call a VIP or Voluntary Incentives Plan. And that path
6 gives you the chance to change towards on a commitment
7 to retire and instead modify the FGD waste stream with
8 new advanced technology that's not yet proven. It's not
9 commercialized and hasn't yet been demonstrated at full
10 scale on a coal power plant. But committing to that
11 path gives you the opportunity to withdraw your
12 retirement commitment.

13 So following that diamond to the left, it
14 states that West Virginia approves of the withdrawal.
15 The State DEP approves that withdrawal and the EPA does
16 not veto that permit change that the DEP accepted.

17 Once you pass that, go down to the next box,
18 then the drive automatic conversion in the original
19 NPDES permit now still stands, unless the DEP grants a
20 compliance date that's later than the one in the current
21 or draft permits we have in today, potentially as late
22 as 10/31 of '25. So that box represents risk in this
23 path as well that the DEP will allow us to change those
24 dates and issue later days, because we will have, at
25 that point, paused action in the project by withdrawing

1 our commitment to retire.

2 Then the next box down is the FGD wastewater
3 treatment plant. And that's what I referred to earlier.
4 It's the new technology that the EPA allows us to
5 install extending the date of compliance for FGD waste
6 stream to 12/31 of '28. And that commitment and that
7 technology is a membrane technology that has not been
8 demonstrated or proven. And that was the biggest piece
9 of why we did not propose pursuing a path with that
10 technology in our earlier filings, because we identified
11 it quite some time ago that the technology is novel.
12 It's never been proven in these applications. And it
13 has risks that we believe are significant, that include
14 the waste it generates from that process could likely be
15 hazardous waste that would be difficult and challenging
16 to dispose of. And the technology may not meet all of
17 the EPA's effluent limitations, particularly with
18 bromide, which we don't believe this technology can
19 achieve the low levels of capture needed to achieve
20 that.

21 Therefore, the risks we believe are very high.
22 However, if you're able to do that path, you can
23 continue to operate. Going back up to the diamond and
24 following down the other side of the diamond, if the
25 plants cannot complete the bottom ash conversion by the

1 date in our permit, because we had paused it in
2 declaring retirement, and the DEP refuses to extend that
3 date or that the EPA vetoes that change that the DEP
4 makes, then we're forced at that point to cease
5 discharge from the plant until either we could come into
6 compliance with the new permit or we retire.

7 So that's a summary of this table and it shows
8 the risks and the challenges that we believe are
9 extraordinary and do not warrant serious consideration
10 for that compliance plan.

11 ATTORNEY BLANKENSHIP:

12 Thank you. Now might be the
13 appropriate time to ask that this exhibit be moved into
14 evidence. And again, this is Company Exhibit A to the
15 Companies' reply that was filed on September 20th. And
16 we ask that it be entered into evidence now as Company
17 Exhibit Number 1.

18 (Company's Exhibit 1 was marked for
19 identification.)

20 CHAIR:

21 It may be so marked and may be admitted
22 into the record.

23 ATTORNEY BLANKENSHIP:

24 Thank you, Chairman. At this time, Mr.
25 Spitznogle is available for Cross Examination.

1 CHAIR:

2 CAG. You want to go first?

3 OFF RECORD DISCUSSION

4 CHAIR:

5 Okay. Mr. Fisk?

6 ATTORNEY FISK:

7 The parties ---.

8 CHAIR:

9 And you're going to have to speak into
10 the microphone, because I cannot understand you.

11 ATTORNEY FISK:

12 I'm sorry, Your Honor. Is this better,
13 Your Honor?

14 CHAIR:

15 No.

16 ATTORNEY PEPER:

17 Your Honor, if I may? I think I
18 anticipated what Mr. Fisk is going to say. He had
19 emailed myself and Mr. Naum about going before him,
20 partly because of these technological limitations. So
21 we would ask and I believe CAG would ask that they be
22 able to defer until after my Cross Examination and Mr.
23 Naum, until after WVEUG's Cross Examination. So if
24 there are issues, we can cover it in person without the
25 difficulties of being online.

1 CHAIR:

2 Okay. So I goofed that by going --- by
3 picking my own order. Right? Okay. So Mr. Naum?

4 ATTORNEY NAUM:

5 Thank you, Your Honor.

6 CROSS EXAMINATION

7 BY ATTORNEY NAUM:

8 Q. Mr. Spitznogle, I was not intending to ask you
9 my questions, but you walked the Commission and the
10 parties through Company Exhibit A accompanying the reply
11 to the response. I just wanted some clarification. If
12 we look at the left side of that chart, and that's the
13 option where the Companies file an NOPP. Can we just
14 look at that option? You would confirm that that is
15 available to the Company; correct?

16 A. Yes, it is.

17 Q. And all of those decision points, which is what
18 I'll call them, that branch off of that are all
19 decisions that the Company is free to make.

20 Correct?

21 A. That is correct.

22 ATTORNEY NAUM:

23 Thank you. That's all I have.

24 CHAIR:

25 Okay. Now that I don't get everything

1 out of order, who next wants to cross examine?

2 ATTORNEY BECHER:

3 I can certainly go, Your Honor, on
4 behalf of Sierra Club, if ---.

5 CHAIR:

6 Okay.

7 ATTORNEY BECHER:

8 If he could depict the next step of
9 this. And Your Honor, I guess I would offer that if it
10 assists the Commission going forward, if you just want
11 to follow this path, that's certainly fine with WVEUG,
12 we will go first.

13 CHAIR:

14 Okay. Fine.

15 CROSS EXAMINATION

16 BY ATTORNEY BECHER:

17 Q. Good morning, Mr. Spitznogle.

18 A. Good morning.

19 Q. And actually, I was going to ask you about the
20 statement in the Companies' filing here. I think you
21 clarified you're the one to talk to about membrane
22 technology and ---?

23 A. Yes. I'm not an expert on that technology, but
24 I'm very familiar with it, with the reviews that we've
25 conducted on it.

1 Q. And is there anybody else that's testifying for
2 the Companies that would be more familiar with that
3 technology or that program?

4 A. No.

5 Q. And so if there --- there's going to be
6 evidence in the record about that program, that would be
7 coming from you. Is that fair?

8 A. That is correct, yes.

9 Q. And I wanted to follow up on your statement.
10 First, the Company statement three, there's no full-
11 scale applications of this membrane technology. And I
12 wanted to ask you, are you aware that EPA considered the
13 membrane technology in their final rulemaking for the
14 2022 ---?

15 A. Yes, I am.

16 Q. And did you look at the technical support
17 documents for that rulemaking?

18 A. It's something in the past I did. I'm not
19 really familiar with them, recall the function.

20 ATTORNEY BECHER:

21 Your Honor, may I approach?

22 And if you could take a look at what I would like to
23 have marked as Sierra Club Exhibit 1 or SC1.

24 (Sierra Club's Exhibit 1 was marked for
25 identification.)

1 BY ATTORNEY BECHER:

2 Q. Would you agree with me that this document
3 appears to be a supplemental technical development
4 document for the revised application document from EPA
5 with their letter and stamp, the current document?

6 A. Yes, that's what it appears to be.

7 Q. If I can have you turn to --- let's start with
8 page 4-4 of the document.

9 A. I'm there.

10 Q. Okay. And I can give you a minute to look at
11 this, but would you agree with me that this is, in fact,
12 EPA's review of technology for that guideline rule and
13 that section --- that pages 4.4 and --- through 4.6
14 identify of review of the membrane filtration
15 technology?

16 A. Yes, that's what it is.

17 Q. Thank you. And I'd like to draw your attention
18 on the top of page 4-6.

19 A. Okay.

20 Q. And the first full sentence there reads, in the
21 steam electric industry, EPI identified 17 pilot-scale
22 studies of nanofiltration and reverse osmosis used for
23 FGD wastewater worldwide and 12 full-scale installations
24 in China, South Korea and Finland. You see that
25 statement?

1 A. Yes.

2 Q. Wouldn't that indicate that there are, in fact,
3 12 full-scale installations of the technology in other
4 countries?

5 A. That's what it's indicating, yes.

6 Q. And again, you indicate that there are 17 pilot
7 studies going on?

8 A. Yes.

9 Q. I would next ask you to look at thermal
10 treatment technology. And that's the following section
11 still on page 4-6.

12 A. Yes, I'm there.

13 Q. And did you or anyone else at the Company look
14 at thermal treatment technology?

15 A. The Company did, yes.

16 Q. Are you familiar with thermal technology?

17 A. Somewhat, yes.

18 Q. Do you know if the thermal technology could
19 meet the FGD effluent limitation guidelines for any of
20 these plants, for all of these plants?

21 A. I do not know for sure. I know that just like
22 when you put the membrane there, there are significant
23 risks associated with operating the technology and the
24 waste that it produces.

25 Q. Well, let's --- let's go with first the

1 question of whether or not there's going to be
2 limitations. EPA posts at the bottom of the first
3 paragraph there, these thermal technologies being used
4 with other technologies to treat FGD wastewater or
5 achieve zero discharge. Would you agree that if they
6 can achieve zero discharge, that they could meet any FGD
7 effluent guidelines?

8 A. I would say that I agree that if we achieve
9 zero discharge that there's no wastewater, given the
10 plan. I would say that there's a lot more to being able
11 to use a technology like this than just meeting the
12 permit --- the prescribed permit limits on a discharge
13 stream.

14 Q. And have you evaluated those issues?

15 A. Yes, we have.

16 Q. You have?

17 A. Yes.

18 Q. Personally?

19 A. I have not personally. Our team has.

20 Q. Okay.

21 Can you tell me what those issues are, as far
22 as your understanding?

23 A. The issues are related a lot to the waste
24 produced. It's a hazardous waste or very likely to be a
25 hazardous waste. So the handling and disposal of it is

1 challenging. There's all --- there are also potential
2 challenges with filing of the equipment. And the
3 results and filing rates would lead to very high
4 maintenance and upkeep of the system. So those types of
5 challenges make it very difficult to deploy something
6 like this without having solid data and similar
7 conditions that we could verify that we could accept
8 those types of ---.

9 Q. You saw the data and similar conditions would
10 come from full-scale application of the plant. So
11 wouldn't that be the most logical source?

12 A. Certainly full-scale applications, but the full
13 scale applications would have to be conducted under
14 similar conditions. Coal from around the world has
15 quite different chemistry. So the constituents in the
16 wastewater streams can be very different from a power
17 plant where coal is burned in China or India or in
18 Europe versus the coal that --- the Appalachian quality
19 coal that we deal with.

20 Q. So you presume there's only one plant in the
21 U.S. to evaluate the data?

22 A. Yes.

23 Q. Okay.

24 And can you look at the next paragraph, please?
25 And this says at the beginning of the second sentence,

1 as described in the 2015 TD or technical documents,
2 three U.S. plants installed this technology for FGD
3 treatment and four coal-fire plants in Italy have also
4 installed to treat FGD wastewater. And then
5 additionally, since this proposal, EPA has identified an
6 additional full-scale installation of thermal treatment
7 for FGD wastewater in a U.S. plant. Have you looked at
8 the data or information from those U.S. plants with this
9 technology?

10 A. I have not personally, no.

11 Q. I presume that you've been following the FGD
12 effluent limitation guidelines or the effluent
13 limitation guidelines in general. You're aware that
14 there have been reconsiderations and new promulgations
15 over the years; is that correct?

16 A. That's correct.

17 Q. And are you familiar with the new EPA
18 announcement for reconsideration that was announced in
19 August of this year?

20 A. Just a month ago.

21 Q. Do you recall the basis for the reconsideration
22 of that rule?

23 A. I know that in part, because there's not a lot
24 of information given on what EPA's intentions are, but
25 one of the areas they were looking at was the effluent

1 limits for the FGD ---.

2 Q. And do you know if they were specifically
3 looking at the applicability of membrane filtration for
4 the FGD wastewater?

5 A. Yes, I believe EPA is.

6 Q. And would it be the case that if EPA were to
7 promulgate a rule requiring membrane filtration, that
8 that would then be something that plants would have to
9 install in the future if they wanted to continue
10 operating?

11 A. If that became a rule or the reality in a
12 future ruling, that it was mandated, then we would have
13 to apply that technology.

14 Q. And that would be a different technology than
15 what would be required to meet the current FGD
16 guidelines; is that correct?

17 A. That is correct.

18 Q. That would likely be an additional expenditure,
19 additional upgrades to include the treatment systems, in
20 addition to what we've talking about at this hearing?

21 A. Well, all of that is assuming that EPA
22 finalizes their rule requiring that. We don't have any
23 way to predict that.

24 Q. Okay.

25 Well, you talk a lot about risks in the flow

1 chart you discuss. Did you include the risk in any of
2 the other options of having to install membrane
3 filtration technology if EPA requires it down the road?

4 A. We did not, because that would be speculation
5 on something we have no basis of speculating on.

6 Q. Didn't you identify other risks here, based on
7 speculation about agency actions or inactions on permits
8 and rules?

9 A. The risks identified on this weren't based in
10 wild speculation. They were based in our understandings
11 of the permit process, the timing it takes to modify a
12 permit and what the rules instruct the State DEP to do
13 with this rule.

14 Q. So you're saying it's wild speculation to
15 consider a risk having to implement the technology, EPA
16 specifically issue a reconsideration ruling saying it is
17 considering acquiring power plants?

18 A. I'm saying we can't draw conclusions on the
19 outcome of EPA's current review of the rule.

20 Q. But you're willing to draw conclusions about
21 other regulatory processes?

22 ATTORNEY BLANKENSHIP:

23 I'm going to object. I think he's
24 already answered the question a number of times.

25 CHAIR:

1 Sustain the objection.

2 ATTORNEY BECHER:

3 Certainly, Your Honor. I'll move on.

4 BY ATTORNEY BECHER:

5 Q. Isn't it true that under the current ELG
6 regulations, you have an option of installing a membrane
7 technology upfront, and having until 2028 to do that
8 without any kind of violation, any kind of contravening
9 the current rule?

10 A. That is true, yes. And that was an option we
11 looked at and we dismissed in our assessment, due to the
12 risks that I've already described.

13 ATTORNEY BECHER:

14 I understand. Thank you, Madam
15 Chairman. Nothing further.

16 CHAIR:

17 Thank you. Okay. West Virginia Coal
18 Association?

19 ATTORNEY JACOB ALTMAYER:

20 Thank you, Madam Chair. We have no
21 questions for this witness.

22 CHAIR:

23 Consumer Advocate?

24 ATTORNEY WILLIAMS:

25 Thank you, Madam Chair.

1 A. I want to make clear on the record right now
2 that the Company has been under --- the Company has been
3 attempting to comply with EPA standards for several
4 years as ---. This isn't a new development. The rule
5 was finalized in the second half of 2020. Was there not
6 a prior rule in effect in 2015? There was a rule with
7 dates and requirements that then got remanded and
8 revised.

9 And the 2020 rules just established some
10 additional options. It didn't do away totally with the
11 deadlines and requirements in the original 2015 rules.
12 It did make changes, but there were --- there were a
13 certain amount of changes. I don't have them listed in
14 front of me.

15 CROSS EXAMINATION

16 BY ATTORNEY WILLIAMS:

17 Q. Would it be fair to say that the Company was
18 always planning to upgrade these plants to continue
19 operation under the 2015 rule? You filed applications
20 for that purpose with the DEP and other agencies who had
21 authority over your permits?

22 A. Yes. Let me be clear. We reviewed the rule,
23 and we evaluated it, and we began assessing different
24 compliance options to meet the requirements of the rule.
25 So we were evaluating those options from the time of the

1 original rule was promulgated in 2015.

2 Q. Would it be accurate to say that the Company is
3 currently on a path to meet all the regulatory standards
4 and guidelines according to its application with the
5 DEP?

6 A. Well, before December of 2025.

7 CHAIR:

8 Mr. Williams, can you --- can you speak
9 closer into the mic and speak up more, please?

10 ATTORNEY WILLIAMS:

11 Sorry.

12 CHAIR:

13 Okay.

14 ATTORNEY WILLIAMS:

15 Is this a little better?

16 CHAIR:

17 Yes.

18 ATTORNEY WILLIAMS:

19 Okay. Thanks.

20 CHAIR:

21 And Mr. Spitznogle, you might need to
22 do the same, please.

23 A. Okay.

24 BY ATTORNEY WILLIAMS:

25 Q. I'll ask my question this way, since it may not

1 have been heard fully before. You have pending
2 applications already in front of DEP to do both CCR and
3 ELG upgrades, do you not?

4 A. Yes, we do.

5 Q. And have those been reviewed and approved ---
6 what stage are they for approval for the DEP?

7 A. We have now a final permit for the Amos Power
8 Plant with the dates in our proposed plan that we've
9 also submitted to EPA for the CCR extensions. And we
10 have draft permits for the Mitchell and the Mountaineer
11 plants.

12 Q. And the one that's been approved for Amos, I
13 think you were anticipating a compliance date of 2022,
14 were you not? Was that compliance date modified?

15 A. Yes. The bottom ash transport water compliance
16 date for Amos is 12/31/2022.

17 Q. And that's before you're having to meet the
18 final deadline for the remodified rule, is it not?

19 A. No, it is not. The rules are very clear, both
20 the CCR and the ELG rule, that we're required to achieve
21 compliance as soon as possible. It states multiple
22 times in the rule text that as soon as possible or ---
23 I'm sorry, as soon as possible and before, in the case
24 of the ELG, 12/31 of 2025. But as soon as possible is
25 the driving parameter that influenced our project

1 planning. And the DEP's approval of the permit was
2 approving the as soon as possible requirement.

3 Q. Yes.

4 But that was assuming you'd have clear
5 regulatory approvals on all levels and anything else
6 there going forward for both Virginia and West Virginia?

7 A. That was --- that was for the quickest time to
8 implement the controls and achieve the limits that the
9 new rule required.

10 Q. But it is --- the standard is as soon as
11 possible, but on or before December of 2025?

12 A. That is correct. The EPA can't predict, in a
13 power plant configuration, how long it'll take to
14 achieve compliance. So they gave a 12/31/2025 date as
15 that last possible date that you could have. But the
16 rule states over and over again as soon as possible.

17 Q. And that is the path you're currently on if you
18 do not file ---?

19 A. That is correct

20 Q. If you have obtained regulatory approvals for
21 doing the work, but there's some questions that still
22 remains about how that's going to be recovered through
23 rates, both in Virginia and West Virginia, does that
24 prohibits you from proceeding?

25 A. A question like that would have to be answered

1 by somebody who's running the business, as to how that
2 decision would be made.

3 Q. Okay.

4 So has the Company made a decision about
5 whether or not it will close Amos if it does not receive
6 a decision that it is demanding today by October 13th,
7 2020?

8 A. I don't know a decision that has been made in
9 that case.

10 Q. So with or without a decision, you could very
11 well, as a company, make the decision to proceed as you
12 are?

13 A. Right now our plan is to proceed with the
14 approved permit conditions that we've been given.

15 Q. Yeah. And if something happens where you have
16 to seek an extension of those permit requirements,
17 there's a mechanism for DEP to do that, is there not?

18 A. Yes. We would get --- we could go back to the
19 agency and file for a permit modification. But as I
20 pointed out in the diagram, EPA has veto authority on
21 decisions that DEP makes in regard to those permits. So
22 there is risk in going back to the agency, to the DEP
23 and requesting a modification to a permit.

24 Q. But one of those concerns are you don't know
25 whether it's economically-feasible yet until you get

1 regulatory approvals from certain agencies. Wouldn't
2 that be a justifiable reason for seeking an extension of
3 the December 22 deadline?

4 A. I can't --- I can't make decisions or
5 statements on the regulatory approval process.

6 Q. You've got --- as I understand it, you say
7 you've got pending similar requests for permit approvals
8 for both CCR and ELG upgrades at both Mitchell and
9 Mountaineer; correct?

10 A. We have --- for all three plants, we have
11 extension requests into the USEPA for the CCR compliance
12 plan. That CCR plan includes the means of achieving
13 compliance portion of the technology that also has ELG.
14 So we're waiting on responses from EPA on those
15 approvals and we're waiting on final permits for
16 Mountaineer and Mitchell for the ELG compliance rules.

17 Q. But you have received full regulatory approval
18 from all three jurisdictions on the CCR, have you not,
19 from a ratemaking standpoint?

20 A. I believe we have. But we don't yet have
21 approval from EPA on CCR.

22 Q. As part of the Company's current request, as I
23 understand it, the Company is basically saying that ---
24 well, I don't want to put words in your mouth. Is the
25 Company saying that it will not proceed with the ELG

1 upgrades at Amos unless West Virginia ratepayers agree
2 to pay a hundred percent of the operating expenses?

3 A. That's an answer that has to be given by the
4 senior management team.

5 Q. Is that a question that we have for --- I can
6 refer to another witness in this case?

7 A. I'm sorry?

8 Q. Is that something that I can refer to the other
9 witnesses scheduled in this case? Does he have
10 authority --- Mr. Short have authority to make that call
11 or clarification or is it somebody else that does that?

12 A. I can't speak for Witness Short.

13 Q. So the same thing with the Mitchell issue and
14 same thing with the Mountaineer issue? The same thing
15 is, you can't make that call and you can't make that
16 declaration. That's what your paper indicates?

17 A. Yes. My goal is environmental compliance,
18 interpreting regulations and advising the Companies on
19 what their options are.

20 ATTORNEY WILLIAMS:

21 I'd like to approach the witness and
22 also hand out an exhibit.

23 CHAIR:

24 You may do so.

25 ATTORNEY WILLIAMS:

1 Put on my mask while I do that.

2 CHAIR:

3 Yes, please.

4 ATTORNEY BECHER:

5 Madam Chairman, on behalf of Sierra
6 Club --- I'm sorry to interrupt, but it seems like ---
7 while Mr. Williams is passing out his exhibits, he
8 reminded me that I forgot to move Sierra Club Exhibit 1
9 into the record. I would like to take this time to move
10 that exhibit into the record, if I could.

11 CHAIR:

12 It may be moved into the record. And
13 had you continued to forget, I would have reminded you.

14 ATTORNEY BECHER:

15 Thank you.

16 BY ATTORNEY WILLIAMS:

17 Q. What I have finished giving the witness is a
18 public briefing documentation that was issued by EPA
19 after it promulgated the October ruling. Have you seen
20 this information or similar information issued by the
21 EPA?

22 A. It generally looks familiar.

23 Q. Would you accept, subject to check, this is
24 information that's provided on the public website of EPA
25 to help guide people understanding the ramifications and

1 rules, how to appropriately apply?

2 A. I don't know where it would be located as
3 to ---.

4 Q. Turning to page five of this or page eight of
5 this exhibit, would you agree that this is an accurate
6 summary of the final rule, and the summary was contained
7 under the requirements for the wastewater direct
8 discharges and subcategories, and the standards that are
9 to be met with arsenic, mercury and other contaminants?

10 A. This looks like the final maximum daily amounts
11 or 30-day averages, or 30-day maximums for the membrane
12 filtration system for this VIP option.

13 Q. So as I understood the federal rule ---
14 registry rule as I read through it, there's basically
15 three POPP options that should be selected by the
16 Company on or before October 13th, is it not?

17 A. That is correct, yes.

18 Q. And if they don't select that, they're deciding
19 to stay on the current path that was previously set for
20 2015?

21 A. Yes, that's correct.

22 Q. Would you agree that one of them was discussing
23 the total shutdown? That it be shut down and you don't
24 have to meet certain requirements by 2028?

25 A. That is correct. We refer to it as the CCR-

1 only option.

2 Q. We've also got a second option to go to
3 basically a low utilization, where you're agreeing to
4 basically use ten percent of your capacity instead of
5 full capacity. You're given a different standard.

6 A. Yes. They give that option for low --- low
7 capacity factor power plants.

8 Q. But obviously the plants we're talking about
9 here are all higher capacity, intended to use in higher
10 --- so that's not really an option for this?

11 A. That is correct. That is not an option for us.

12 Q. And the third option I believe you talked about
13 earlier, doing the VIP selections, where you'd be going
14 to the best available technology utilization under the
15 rule voluntarily?

16 A. Well, I wouldn't use available technology
17 today. The EPA has made it clear that it's not as
18 available today. They believe it can be in the future.

19 Q. But if a company were to select that pathway,
20 then it could remain open without --- and meet a certain
21 set of standards through December 31, '28 without ---
22 that would be their final deadline for achieving the
23 goal, is it not, if they didn't need anything else?

24 A. The deadline to meet the VIP standards is
25 December 31st of 2028.

1 Q. Do all three of those options also include
2 alternatives for selecting a different path if something
3 becomes more or less economical over the years?

4 A. Yes. Up to a certain date, you can switch
5 between the different options. Again, those are subject
6 to the State and environmental agency approving any
7 changes to the compliance dates. And we would also be
8 held to the previous standards. But yes, subject to
9 those limitations, you can switch back and forth.

10 Q. And then so if the Company was going to elect
11 to shut down by December 31, 2028, it could jump on a
12 different track, as long as they're meeting the ---
13 or switch to a new deadline?

14 A. Subject to the ability to modify permits, yes.

15 Q. Once you have chosen the track that you're on
16 now, if you don't file an NOPP on October 13th, would
17 the Company still have an option to shut down if it
18 became uneconomical to operate the plant?

19 A. If we do not submit an NOPP by October 13th,
20 that we would be obligated to the CCR plus ELG path that
21 we've laid out, unless we choose to stop progress on
22 there. And then we would at that point be forced into
23 retiring and refueling that.

24 Q. And by refueling, you mean bring it back online
25 and achieve compliance with the requirements?

1 A. No. Refueling means switching from coal to a
2 noncoal fuel source.

3 Q. And do you understand the rules if a Company
4 decides to shut down, can it change its mind and reopen
5 if financial conditions change?

6 A. If we file an NOPP by October 13th, that option
7 would be available to us.

8 Q. But if you did that option, you're committing
9 to shut down on December 31, 2028. So you're saying you
10 can reverse that commitment, if you wanted to.

11 A. I'm saying that the rule allows for that
12 pathway, but it's not guaranteed. And it has to be done
13 by particular dates laid out in the rule. That changing
14 path has to be done by a particular date in the rule.
15 And I don't have that date in front of me, but I believe
16 it's --- it's certainly not 2028.

17 CHAIR:

18 Mr. Spitznogle, can you speak into the
19 microphone? They're still having a hard time hearing
20 you.

21 A. Okay. Let me move the microphone closer. Can
22 you hear that?

23 CHAIR:

24 Yes.

25 A. Okay. Sorry.

1 BY ATTORNEY WILLIAMS:

2 Q. Do you or your Counsel have a copy of the rules
3 that you could look at? Because I'd like to have the
4 Commission take administrative notice of the federal
5 register 40 CFR part 423, part of volume 85 --- on
6 Tuesday, February 13th, 2020, starting on page 64 ---.

7 A. I have that rule, yes.

8 Q. Okay.

9 I'd like you to turn, if you have those ---
10 we're looking through the dates, I believe. Excuse me.
11 Because I pulled it apart intending to copy it, but you
12 may not have it. I believe it's under 423.19, section
13 O.

14 A. Do you have a page reference?

15 ATTORNEY WILLIAMS:

16 I have a document I was just handed.
17 Excuse me, Your Honor. Can I have about five minutes to
18 make sure I got ---? Looking at, oh, I think it was
19 page ---

20 CHAIR:

21 Yes.

22 ATTORNEY WILLIAMS:

23 --- 64719 --- it's discussing the
24 options for transferring between ---.

25 CHAIR:

1 So you're asking to take five minutes?

2 ATTORNEY WILLIAMS:

3 If I could. I don't need five minutes
4 now.

5 CHAIR:

6 Okay.

7 BY ATTORNEY WILLIAMS:

8 Q. On page 64719.

9 A. I'm on 64719.

10 Q. Yes. There's ability to select --- to switch
11 between alternatives between on or before December 31,
12 2023.

13 A. Yes, I see that.

14 Q. So as I understand it, if a Company makes a
15 decision to convert from --- if it made a decision ---
16 it can switch to one of the other alternatives on or
17 before the 2023 deadline? There's a variety of things -
18 --.

19 A. There are two dates, December 31st, 2023, on or
20 before, and then there's an on or before December 31st,
21 of 2025.

22 Q. I believe 2025 relates to voluntary incentive
23 program, which you said you do not want to choose. It
24 says under I, as I'm reading it, it says on or before
25 2023, if a company has elected to shut down, it can

1 change paths.

2 A. That is correct.

3 Q And on before December 31, 2025, if a company
4 has selected to try to implement the VIP --- it may also
5 change paths.

6 A. That is correct.

7 Q. And if you make no election before October
8 13th, 2025 to either one of those two paths, you can
9 stay on the path you're on?

10 A. That is correct.

11 Q. But the key to everything is however you're
12 going to be operating your plants, since it discharges
13 into a stream, we have to follow and file an approved
14 NPDES permit to meet the applicable standards for
15 whichever path you're on?

16 A. That is right.

17 Q. And you can't switch paths in a way to lower
18 those requirements of an NPDES permit, but the path you
19 select could increase requirements?

20 A. Yes. The Company must maintain many more
21 stringent limitations ---.

22 Q. On the exhibit I distributed out earlier on the
23 2020 Steam Electric Reconsideration Rule, implementation
24 briefing that was issued by the EPA, I'd like you to
25 refer to page 14 of that exhibit. It has a section from

1 EPA's presentation that is made to the public.

2 A. I am there.

3 Q. It sets forth the timing of the current rules
4 you're under that are generally applicable --- FGD
5 wastewater, transport water requirements. It shows
6 what's applicable to you for when you --- if you were
7 generally applicable, high flow subcategory, lower
8 utilization category, a PC-3PE subcategory, and a VIP
9 category. Which category is the Company on now? Are
10 you under general applicable or high flow subcategory?

11 A. We are on the generally applicable.

12 Q. So right now your FGD wastewater requirement --
13 - ELG has to be met on or before December 31, 2025 or as
14 soon as possible, which is what you're pursuing now?

15 A. That is correct.

16 Q. And that's --- I'm agreeing that's page --- on
17 page 15, that's what's acknowledged. You have to
18 consider the granting authority is the one who
19 determines when it's in compliance. And that can be
20 determined --- it can change according to the switching.

21

22 A. That is correct.

23 Q. You have many admissions that are necessary for
24 getting your NPDES permits for all the paths we talked
25 about there.

1 A. Yes, we have.

2 Q. And they are going forward and being approved.

3 A. Yes.

4 Q. I'd like to turn to page 20 of that same
5 exhibit. And this is about as clear as your other
6 exhibit you had earlier when they were looking at
7 alternatives on how you could switch from one path to
8 another.

9 A. I'm there.

10 Q. So this is also acknowledging that the records
11 and different things, and the federal rules about how
12 you can go from one path to another.

13 A. That's correct.

14 Q. And as follows on, I think page 21, 22, 23, by
15 examples on why a company might switch paths. Of course
16 this is not every example, but it's sizable.

17 A. There are three separate examples.

18 Q. Example one is talking about a facility that's
19 filed its NOPP saying it intends to retire. We have now
20 --- if for some reason the Company wants to shut down
21 its plant, it now needs to do a PSC approval list.

22 A. Yes.

23 Q. If the PSC or even the PJM decided that one or
24 more of these plants is so important to the integrity of
25 the grid that they didn't allow it to shut down, would

1 it be able to change paths ---?

2 A. Yes. If we filed the NOPP by October 13th,
3 this example allows or shows a specific scenario and
4 justifies switching between one NOPP and a different
5 NOPP.

6 Q. I'm going to skip example two, because that's
7 talking about the low utilization, which we all agreed
8 we're not talking about that.

9 Example three is talking about an entity that's
10 found in NOPP in 2021 in the VIP ---. And that's put in
11 a membrane.

12 A. Yes.

13 Q. And the timeline for achieving those
14 milestones, as I understand the rules, if you file for
15 the VIP option, you would give an annual upgrades on
16 your progress, but the ultimate compliance standards
17 don't kick in until 2020 ---?

18 CHAIR:

19 2020? What date did you ---?

20 ATTORNEY WILLIAMS:

21 2028.

22 CHAIR:

23 Okay.

24 ATTORNEY WILLIAMS:

25 Yeah. Same date you have for closing.

1 A. Or the FGD stream, the wastewater stream,
2 FGD ---. We still have the much earlier date for the
3 bottom ash transport, consistent with the NPDES permit
4 we already have the Amos and the draft permits we have
5 of Mountaineer and Mitchell.

6 Q. But this is recognizing that if financial
7 conditions change and other options look better and more
8 achievable, you can actually jump off the VIP track and
9 go back on the general track?

10 ATTORNEY BLANKENSHIP:

11 I'm going to object to the question,
12 because it asks a scenario that's not spelled out on
13 this page. I don't --- and I'm trying to read it
14 quickly. I don't see anything in here that says
15 financial conditions change. He keeps asking to
16 interpret what example three means.

17 ATTORNEY WILLIAMS:

18 Well, financial conditions should be
19 something that is a way of treating to be more
20 economical than another one, unless you were going VIP,
21 which you have the standards, the parameters ---.

22 CHAIR:

23 Well, the witness can answer it if he
24 can.

25 ATTORNEY BLANKENSHIP:

1 And again, I'm a little lost. I'm not
2 sure what the question is. Is the question to just
3 acknowledge that example three is a possibility?

4 ATTORNEY WILLIAMS:

5 That's one of them, yes.

6 BY ATTORNEY WILLIAMS:

7 Q. I'll just ask the question ---. If the Company
8 selected the VIP option and tried to pursue that option,
9 does this same rule apply to the path, where it can go
10 back into general compliance?

11 A. That's not how I read this option. It looks
12 like the switch is between the VIP and the low
13 utilization option. It talks about facility C becomes
14 less economical, such that it is operating below a ten
15 percent utilization.

16 Q. Let's jump back to the federal rule itself. On
17 page 64719-02, which is on the lower part of the third
18 column.

19 CHAIR:

20 What page was that, Mr. Williams?

21 ATTORNEY WILLIAMS:

22 64719. I'm looking at the federal
23 rule.

24 CHAIR:

25 Okay.

1 BY ATTORNEY WILLIAMS:

2 Q. And I think we're talking about --- I'll read
3 it into the record first and then ask you a question.
4 It says under B for voluntary incentive program
5 limitations under this paragraph and also below
6 utilization on or before --- starts on or before
7 December 31, 2025 a facility may convert from A, from
8 voluntary incentive programs limitations under paragraph
9 (g)(3)(i) of this section. Limitations for electric
10 generating units permanently ceasing is one option. B,
11 they can change from limitations from electric
12 generating units permanently ceasing coal combustion
13 under the paragraph to the voluntary incentives program.
14 And I'm not reading all the rest of the citations. And
15 C option, go from limitations for low utilization
16 electric generating units to generally applicable
17 limitations. And D, go from limitations for low
18 utilization to voluntary incentive program. And it can
19 go to E, from limitations for low utilization electric
20 generating units to permanently ceasing. So they can
21 jump back and forth between these elections. Is it
22 clear under the rule whether or not they can go from one
23 of these options back to general?

24 A. I don't see that option.

25 Q. Is that something that can be clarified

1 potentially by the DEP or EPA?

2 A. They could certainly do that.

3 Q. Do you believe it would be reasonable for the
4 Commission or the parties to make that inquiry to DEP or
5 EPA, so it could decide whether this October 13th
6 deadline is a line in the sand for you or whether you
7 can proceed as you are?

8 A. It's my understanding of the rule that we
9 cannot seek back to the general path. Once we've made
10 the commitment to NOPP, we can't go back to --- you
11 can't go back. You can't rescind it and not go down one
12 of the other NOPP paths.

13 Q. Well, it says you can go from the permanent
14 cease into general under, I guess it's under ---.

15 CHAIR:

16 Mr. Williams, you're going to have to
17 speak into the microphone.

18 ATTORNEY WILLIAMS:

19 I'm sorry.

20 BY ATTORNEY WILLIAMS:

21 Q. Under (ii)(B), you can go from the substation
22 to general, could you not? (ii)(A). I'd like to go
23 back to --- under (ii)(B). It lets you go from
24 permanent ceasing to generally applicable limitations.

25 ATTORNEY BLANKENSHIP:

1 Your Honor, the regulation says what it
2 says. I believe he's asking him his interpretation,
3 which he's already given. And if it's different then --
4 - Mr. Williams, you know, he's already answered your
5 question. I'm not sure what path we're going down now.

6 ATTORNEY WILLIAMS:

7 The path I'm going down is why don't we
8 ask DEP and EPA whether he has that option?

9 ATTORNEY BLANKENSHIP:

10 Okay. Well, I don't know that you
11 asked that question.

12 ATTORNEY WILLIAMS:

13 That's where I'm leading to. We need
14 to have that in the record. You're making certain
15 presumptions ---.

16 CHAIR:

17 Okay. Mr. Williams, ask Mr. Spitznogle
18 if he's asked for --- if he's asked EPA for that option
19 and then go on from there.

20 ATTORNEY WILLIAMS:

21 Okay.

22 BY ATTORNEY WILLIAMS:

23 Q. Mr. Spitznogle, have you asked DEP or EPA
24 whether you would have an alternative to go from either
25 VIP or a closure selection back to generally-applicable

1 standards?

2 A. We have not asked EPA or DEP because we don't
3 find that option in the reg.

4 CHAIR:

5 Okay. Now, it's time for us to take a
6 morning break. Thank you.

7 SHORT BREAK TAKEN

8 CHAIR:

9 So let's go back on the record. And
10 Mr. Williams, you may proceed. And once again, I have
11 to remind everybody, please speak into your microphone.

12 And apparently behind Mr. Williams, I am the worst
13 defender.

14 ATTORNEY WILLIAMS:

15 Okay. I'll try and do better.

16 CHAIR:

17 As will I.

18 ATTORNEY WILLIAMS:

19 I just have a couple of questions. On
20 the break, I went ahead and distributed sections from
21 the federal rules I was questioning the witness from. I
22 thought it would be beneficial to have that in the
23 record. The selected pages I have from federal register
24 585 number 198 starting on page 64650, I included a
25 couple pages. And then the pages I was talking about,

1 64719 and 720 are attached. I'd like to have that
2 marked as CAD Cross Examination 2.

3 (CAD's Cross Examination Exhibit 2 was
4 marked for identification.)

5 ATTORNEY WILLIAMS:

6 And the earlier exhibit that I gave to
7 the witness, I'd like to have that identified as CAD
8 Cross Examination Exhibit Number 1.

9 (CAD's Cross Examination Exhibit 1 was
10 marked for identification.)

11 ATTORNEY WILLIAMS:

12 And both of the records be admitted.

13 CHAIR:

14 So you wanted them both admitted into
15 the record?

16 ATTORNEY WILLIAMS:

17 Yes.

18 CHAIR:

19 They may be admitted into the record.

20 ATTORNEY BLANKENSHIP:

21 Mr. Williams, if you could please
22 repeat what page number CAD Number 2 started with?

23 ATTORNEY WILLIAMS:

24 64650.

25 ATTORNEY BLANKENSHIP:

1 Oh.

2 ATTORNEY WILLIAMS:

3 That's just the --- sort of the
4 background information, things we started and what page
5 they're on. And then I included the two numbers I was
6 questioning him on. My understanding, that included
7 more information than you had earlier.

8 ATTORNEY BLANKENSHIP:

9 Thank you.

10 BY ATTORNEY WILLIAMS:

11 Q. I just want to ask one other question this way.
12 I know I asked you whether you --- personally asked the
13 DEP and EPA for clarification. Are you aware whether or
14 not the Company has made inquiries to either the EPA or
15 DEP about the ability to go from either closure or
16 voluntary back to general?

17 A. I don't know of a specific conversation with
18 EPA on this or DEP, but I did take some time to read a
19 little more closely the exhibit. And it's really on
20 page 64720, the paragraph --- the number (3). That's
21 the reference that we identified to show you can't go
22 back to general, because it says here, where a facility
23 seeking a transfer under this other area of a section
24 that's currently under more stringent limitations than
25 the limitations being sought, the facility must continue

1 to meet those more stringent limitations.

2 So if we're on the VIP path, which has, as was
3 shown in the other exhibit, very stringent limitations,
4 if we were to go back or attempt to go back to general,
5 we would take with it those stringent limitations. So
6 you really can't go back, because those limitations are
7 set assuming the membrane system can achieve those
8 limits.

9 Q. By 2028?

10 A. By 2028, correct.

11 Q. And between now and 2028, what standards are
12 applicable on the permit? Isn't that determined each
13 year by the progress report and approval of the agency?

14 A. The Department won't change the permit at issue
15 with the --- after the filing. So we make an NOPP
16 filing, we will get a major permit modification that
17 we'll have to comply with the dates and the limits set
18 in that permit. And we can't reverse those stringent
19 limits on the VIP to go back to general.

20 Q. So for those reasons, if the Company is going
21 to keep the plants open, it should stay on the course it
22 is on?

23 A. Well, in the proposal we put forth for CCR plus
24 ELG enables the plant to continue to operate.

25 Q. And those are the way the permit applications

1 have been made and approved for Amos and is pending for
2 the other two?

3 A. Yes. Our final permit for Amos and the draft
4 permits for the other two facilities reflect CCR plus
5 ELG path.

6 Q. And if you wished to change those standards,
7 you would have to file a new application to reopen and
8 revisit the issue?

9 A. Yes. You would withdraw the current NOPP and
10 apply for a different path.

11 Q. My next question is, when you said you would
12 withdraw the current NOPP, you don't have a current
13 NOPP, do you?

14 A. I'm sorry. I'm back on this graphic with the
15 triangle. No, that's right. We --- to go back to your
16 question, we don't have a current NOPP. My answer was
17 based on --- I was answering this if we had filed one on
18 October 13th ---.

19 Q. And one clear option the company can always do
20 is go forward beyond October 13th without sliding into
21 the three alternative paths, just stay on the current
22 path?

23 A. That is correct.

24 ATTORNEY WILLIAMS:

25 No further questions.

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CHAIR:

Okay. Thank you. Okay. CAG?

Okay. I cannot hear you.

ATTORNEY FISK:

Can you not hear me? Can you hear me?

CHAIR:

No.

ATTORNEY FISK:

All right. Any better?

CHAIR:

Yes.

ATTORNEY FISK:

Okay. Okay. Thank you, Madam

Chairman. Sorry for the technical difficulties here.

CROSS EXAMINATION

BY ATTORNEY FISK:

Q. I wanted to clarify something that. The issued permits that you have, you can file an NOPP before October 13th without needing to finalize the permit. Correct?

A. We would make the filing and that would --- that would start the process of DEP approving the NOPP with a modified permit. So we would --- that would initiate the process of modifying the permit, once we file an NOPP.

1 Q. And my understanding is that you would be
2 allowed to transfer --- is that your understanding?

3 A. I apologize, I didn't hear the entire question.

4 Q. Okay.

5 My understanding is that ---.

6 ATTORNEY FISK:

7 How about now? That's better?

8 CHAIR:

9 No.

10 ATTORNEY FISK:

11 No? Is it any better?

12 CHAIR:

13 Try your question now.

14 ATTORNEY FISK:

15 Okay.

16 BY ATTORNEY FISK:

17 Q. My understanding is that a permit is to allow
18 for transfers to an option --- another permit option, is
19 that not your understanding?

20 A. It is not entirely correct. The permit would
21 have to allow for that. In other words, the DEP would
22 have to structure and write a permit that built that
23 mechanism into it, to move back and forth. As we've
24 seen today, we have not been issued a permit from DEP
25 that allows for that.

1 Therefore, if we're going to make a change, we
2 have to request the change and DEP would have to produce
3 a new permit. And it's our hope that if we had to go
4 down that path, that they would issue a permit that
5 built that mechanism into ---. Our current permit at
6 Amos and our draft permits at the other two facilities,
7 do not allow for that movement between options.

8 Q. You requested that for the Mitchell plant;
9 correct?

10 A. We requested it. It did not make it into the
11 permit.

12 Q. It was a draft permit?

13 A. That is correct.

14 Q. And you requested for Amos and Mountaineer?

15 A. Yes, we did.

16 Q. Okay. And you're saying that because DEP so
17 far has not included it, you cannot do that option
18 without a modified --- permit?

19 A. Can you repeat your question? I'm having a
20 hard time hearing you. I'm sorry.

21 Q. Without a modified NOPP permit, you wouldn't be
22 able to submit an NOPP because DEP requirements ---?

23 A. No. We would --- we can submit an NOPP by
24 October 13th. And then based on that submittal, the
25 DEP's response would include a modification to our

1 current permit.

2 Q. And if you submit an NOPP by October 13th, with
3 regards to the bottom ash transport monitor ELG
4 standard, you could change your --- before December
5 31st, 2025; correct?

6 A. I don't think that it's that simple. This is
7 why. For one thing, that bottom ash transport record
8 that is part of the CCR compliance strategy and the plan
9 that we submitted to EPA that we're still waiting for
10 approval from. So the dates in our current NPDES permit
11 and the draft permits reflect the dates in the submittal
12 to the EPA for CCR.

13 You have to remember both rules are
14 intrinsically tied at that bottom ash transport water
15 piece of the program. You need it for achieving
16 compliance with both rules, based on the plans we put
17 together that achieve compliance as soon as possible.

18 Q. Right. For purposes of the ELG rule, the rule
19 itself allows you to transfer from a cessation of coal
20 burning compliance option to the bottom ash --- standard
21 by December 31st, 2025; correct?

22 A. Can you --- can you rephrase that?

23 Q. Yes. Even if I did the CCR with regards to the
24 ELG rule, the regulations allow you to transfer from a
25 --- compliance option to that bottom ash transport

1 water by December 31st, 2025; correct?

2 A. Yes, however, we're still bound by the date
3 that our CCR --- the bottom ash transport water has to
4 be looked at separate from the FGD flow ---. There's
5 two different areas of compliance on two different
6 schedules. And maybe I'm not --- I'm still having a
7 little bit of trouble hearing some questions. So I'm
8 not sure I'm answering you.

9 ATTORNEY FISK:

10 Madam Chairman, can I ---? It doesn't
11 seem to be working.

12 CHAIR:

13 I'm sorry, what did you say?

14 ATTORNEY FISK:

15 I said, can I call in, since the audio
16 doesn't seem to be working very well?

17 CHAIR:

18 Yes, you may.

19 ATTORNEY FISK:

20 Okay. I will be back.

21 PAUSE IN RECORD

22 ATTORNEY FISK:

23 Hi. This is Shannon Fisk. Can you all
24 hear me?

25 CHAIR:

1 Yes.

2 ATTORNEY FISK:

3 Great. Thank you, Your Honor. I
4 apologize again.

5 BY ATTORNEY FISK:

6 Q. Okay. Mr. Spitznogle, with regards to the CCR
7 compliance plan, I believe you have testified that if
8 you would decide not to comply with the ELG option, and
9 instead wanted to go with a --- you wanted to change,
10 you could go to a compliance plan. Is that correct?

11 A. That is correct. The current filed plan
12 includes the bottom ash transport water modifications
13 that are also part of ELG. It makes no sense, from a
14 project and cost perspective, to combine the two with
15 that technology. However, if we were only to do CCRs,
16 there's a better way to achieve it, more economical way
17 to achieve it, which is to not do that bottom ash
18 transport modification, but instead build a new CCR
19 compliant pond for that bottom ash transport water, and
20 that would require us to go to EPA and request a change
21 in what they approve.

22 As of today, they have not approved our initial
23 plan. So there's no mechanism in the rule that allows
24 for a change of that plan before it's approved. So we
25 ultimately --- we don't have a way to do that until

1 they've approved it, from our understanding today. We
2 reached out to the EPA to see if that's a possibility
3 and it's not clear from their response at this point
4 that there is a mechanism to be met prior to their
5 approval.

6 Q. You've had a discussion with EPA about that
7 or ---?

8 A. We had a discussion with EPA staff, seeking
9 that scenario if the ultimate outcome of the units are
10 that we would pursue CCR only versus the plan we filed.
11 The question was, can we go directly to EPA to modify
12 the CCR plan? And they haven't provided an answer to
13 give any more clarity on that scenario than what's
14 already in the rule, which is nothing on that matter.

15 Q. So you're still waiting for further
16 clarification from them?

17 A. That is correct.

18 Q. And they have not decided under the old
19 application; correct?

20 A. No, they have not --- they have not decided on
21 anybody's who has filed under this extension request.
22 They're all under what's known as completeness review.
23 They've been in that --- in that category since the
24 November 2020 filing.

25 Q. If EPA were to allow you to file for that

1 CCR-only option, you would be able to comply with the
2 CCR rule and retire the Mitchell plant by 2028 for
3 purposes of the ELG rule; is that correct?

4 A. Assuming the EPA approves the plan, then, yes,
5 that is correct.

6 Q. And are you aware that the Kentucky Public
7 Service Commission had rejected Kentucky Power's request
8 for approval of the ELG at the Mitchell plant?

9 A. I am aware of that, yes.

10 Q. Okay. And are you aware that that Order of the
11 Kentucky Public Service Commission prohibited any of the
12 ELG work at the Mitchell plant without prior approval
13 from that Commission?

14 A. I'm not familiar with the inner workings of how
15 --- how their process works. So I can't really speak to
16 that.

17 Q. Okay. Do you know who would be able to speak
18 to that?

19 A. I do not. I do not know. I'm not the expert
20 on the regulatory rules in Kentucky.

21 Q. Are your Companies currently proceeding with
22 the ELG work at the Mitchell plant?

23 A. We have initiated some of the work required for
24 ELG compliance. It's all in alignment with the plans
25 that we submitted to EPA and to the West Virginia DEP.

1 There are early stage project activities that must
2 continue now in order to achieve the as-soon-as-possible
3 date in our permit and in our extension request. So
4 we've begun some of the initial work.

5 Q. To your knowledge, are they proceeding with
6 work on the ELG compliance on the Mitchell plant in
7 Kentucky ---?

8 A. I don't --- I'm not on the project side of our
9 company. So I don't know what activities have been done
10 at a particular time. So I don't know what's been done
11 recently.

12 Q. Okay. And I --- am I correct that you, if the
13 Companies do not file on the Mitchell plan by
14 October 13th, and for whatever reason they are then
15 unable to conclude the ELG --- they would have to retire
16 --- December 31st, 2025?

17 A. Actually, if you go back to Exhibit A of the
18 flowchart, what you're describing on there is going down
19 the right side, which is the green boxes. If you exit
20 out of the left side of the second box into the diamond.
21 What you're describing is if we have not filed an NOPP,
22 I believe is what you're saying. We started progressing
23 towards the CCR, the CLG project completion. And then
24 at some point after 10/13, we can choose instead to
25 cease --- cease progressing on those projects.

1 And if that's the path you're asking about, we
2 would have to retire or refuel the plant based on the
3 earliest applicable compliance date. So it depends on
4 when we stop this work as to what that --- whether we've
5 already passed or whether a date is in progress.

6 Q. So if you did not file an NOPP for the Mitchell
7 plant, and the Kentucky Public Service Commission
8 prohibits the Companies from carrying out the plan, the
9 Mitchell plant have to retire by the compliance date; is
10 that correct?

11 A. That is correct, yes.

12 Q. And that compliance date would be at least
13 three years before the December 31st, 2028 retirement
14 date authorized if you do file an NOPP. Is that right?

15 A. Yes, that is correct.

16 Q. And I believe you have referenced earlier that
17 if you were to speak to --- if you filed an NOPP and
18 were to seek to change the compliance pathway later, you
19 would need to get another permit application. Is that
20 your testimony?

21 A. I'm not --- I don't follow your question.

22 Q. So if you file NOPP on the Mitchell plant on
23 October 13th, so that option, and then a year later you
24 decide to take a different pathway, do you --- is it
25 your impression that you would need to file another NOPP

1 permit modification at that time?

2 A. Yes, that is my understanding.

3 ATTORNEY FISK:

4 Madam Chairman, may we approach ---?

5 CHAIR:

6 Say that again?

7 ATTORNEY FISK:

8 May we approach? Mr. Pepper has an
9 exhibit of ours to pass out.

10 ATTORNEY PEPPER:

11 Madam Chairman, I've agreed to pass out
12 hard copy exhibits to ---.

13 CHAIR:

14 Yes, you may.

15 ATTORNEY FISK:

16 Thank you.

17 ATTORNEY PEPPER:

18 And Chairman --- do you want the
19 federal register pages ---?

20 ATTORNEY FISK:

21 Yes, yes.

22 ATTORNEY JACOB ALTMAYER:

23 Chairman Lane?

24 CHAIR:

25 Yes.

1 ATTORNEY JACOB ALTMAYER:

2 I don't want to unnecessarily disturb
3 the proceeding, but if the Sierra Club and the Earth
4 Justice group are going to work together on exhibits
5 today, why weren't they made available so those
6 participating virtually can see them as well? It just
7 doesn't smell right.

8 ATTORNEY FISK:

9 Your Honor, we'd be happy to email the
10 exhibit to Mr. Altmeyer.

11 ATTORNEY JACOB ALTMAYER:

12 He didn't get them out prior to the
13 start of today's hearing.

14 ATTORNEY FISK:

15 Your Honor, there's no reference to
16 distributing any exhibits in advance of the hearing.
17 We're happy to email them to Mr. Altmeyer and he will
18 have the same packet that everybody else has.

19 CHAIR:

20 Mr. Altmeyer, we will note your
21 objection and perhaps over the lunch hour, these
22 exhibits can be made available to you.

23 ATTORNEY PEPPER:

24 Just for clarification on the record,
25 Madam Chairman, I would say that personally I have not

1 seen any of these documents prior to this morning. As
2 far as the work that we gathered to put together
3 exhibits, my only role in this is to physically hand
4 them out so those here can have them ---.

5 ATTORNEY JACOB ALTMAYER:

6 It's the same thing.

7 ATTORNEY FISK:

8 May I proceed?

9 CHAIR:

10 Okay. Let's proceed.

11 ATTORNEY FISK:

12 Thank you, Madam Chairman.

13 BY ATTORNEY FISK:

14 Q. Mr. Spitznogle, you have been handed a document
15 that is a two-page federal register notice --- ELG rule;
16 is that correct?

17 A. It appears to be, yes.

18 Q. Okay. Have you seen this register notice
19 before?

20 A. I'm sorry. I didn't get your question.

21 Q. Had you seen this federal register notice
22 before?

23 A. It does not look familiar.

24 Q. Okay. Were you --- were you involved in the
25 drafting of the discussion about the ELG compliance ---

1 the Companies' reply brief ---?

2 A. Yes, I was.

3 Q. Okay. And do you have that filing before you?

4 A. Yes, I do.

5 Q. Okay. And if you could turn to page seven of
6 that filing ---.

7 A. Okay. I'm there.

8 Q. Okay. It references a federal register notice;
9 is that correct?

10 A. Yes, that is correct.

11 Q. Okay. That is a federal register notice ---
12 what you've been handed?

13 A. Okay.

14 Q. Is that correct?

15 A. I believe --- I believe that to be the case.

16 Q. Okay.

17 A. This is just an excerpt out of something. So
18 I'm just --- I'm just saying I don't have the context of
19 this to clearly verify that that's what it is.

20 Q. Okay. If you can be on the exhibit, the
21 heading number 4 on the first page. It says
22 transitioning ---.

23 A. Yes. I am there.

24 Q. Okay. And do you see at the very bottom of the
25 first paragraph under that heading 4, there is a

1 reference to EPA is finalizing for the allowing for a
2 plant to get a permit to transfer between two
3 subcategories or between a subcategory and the VIP,
4 without undergoing a permit modification?

5 A. Yes, I see that.

6 Q. Okay. And it's your --- I believe you
7 indicated earlier that you applied to receive a permit
8 application in order to transfer between the one
9 compliance option to another compliance option; is that
10 correct?

11 A. That is correct.

12 Q. And does this federal register notice indicate
13 you would not need a modification?

14 A. As I described a little bit earlier to a
15 question, the permit has to be designed with that
16 capability built into it. Absent the mechanism
17 identified within the permit, we don't have that ability
18 to move back and forth without a permit modification.
19 So our request to DEP was to build that into future
20 permits to allow for that movement without subsequent
21 permit modification. But as it stands today, I do not
22 hold permits that have that mechanism identified within
23 the permit.

24 Q. Right, but if you file a document that's
25 accepted by the DEP, it wouldn't have to have that

1 modification; correct?

2 A. Well, I don't know what they're required to do,
3 but we would request that they did that, yes.

4 Q. Okay. And if they did that, included that,
5 that you could, in the future, change your compliance
6 option --- correct?

7 A. That is my understanding. But again, without
8 seeing the language in the permit, I wouldn't be able to
9 be definitive on my understanding of how easy or
10 possible it would be to make that move.

11 ATTORNEY FISK:

12 Okay. I don't have any further
13 questions at this time.

14 CHAIR:

15 Okay. Thank you. Ms. Braswell?

16 ATTORNEY BRASWELL:

17 Mr. Head will cross examine this
18 witness.

19 CHAIR:

20 Mr. Head?

21 ATTORNEY HEAD:

22 Thank you, Chairman.

23 CROSS EXAMINATION

24 BY ATTORNEY HEAD:

25 Q. This has been covered in some of the responses,

1 Mr. Spitznogle, but just wanted to ask you on the
2 record. Could you speak to the nature of the cost
3 increases for the estimates of the work to be completed
4 at plants for the CCR and the ELG work? It's an
5 approximately \$65,000,000 increase and I'm just curious
6 what's changed over the last nine months.

7 A. Yeah. I don't have intimate knowledge of those
8 cost changes. I'm aware that there's --- that there's
9 cost escalations, but I don't know the source or the
10 reason for those changes.

11 ATTORNEY HEAD:

12 Okay. Thank you. That's all.

13 CHAIR:

14 Commissioner Larrick?

15 COMMISSIONER LARRICK:

16 I have no questions.

17 CHAIR:

18 Commissioner Raney?

19 COMMISSIONER RANEY:

20 Yes, ma'am, if I can get this thing to
21 work properly and get close enough to the microphone.
22 I'm curious with all the discussion here --- and I feel
23 like I'm in a DEP hearing. But Mr. Spitznogle, do I
24 understand that October 13th is an absolute deadline in
25 which you have to make a decision or that the Company

1 has to make a decision as to whether you're going
2 forward? And that decision has been pretty much made
3 with the filing of the application of the NPDES permit?

4 A. October is the --- hopefully this chart helps.
5 On or before October 13th, we have the option of filing
6 an NOPP, which gives us this chance to do something
7 other than what we filed with the EPA or DEP. If we do
8 nothing by October 13th, as far as filing an NOPP, then
9 we take it down the green side of the chart, which is
10 consistent with what we've already filed with the EPA
11 and with the permit we've been issued and drafted in
12 final form from the DEP.

13 COMMISSIONER RANEY:

14 And put that in English for me now.

15 A. Okay.

16 COMMISSIONER RANEY:

17 What you've done is you filed for NPDES
18 applications at DEP, the three plants?

19 A. That is correct.

20 COMMISSIONER RANEY:

21 For the ELG part of this?

22 A. Yes, that's correct.

23 COMMISSIONER RANEY:

24 Okay. Now, you have to do something
25 more on October 13th. Do you have to take another

1 action, do something with DEP or ECA?

2 A. October 13th, if we wish to change our plan
3 from what we filed with them ---.

4 COMMISSIONER RANEY:

5 On the application?

6 A. That is correct.

7 COMMISSIONER RANEY:

8 Okay.

9 A. Then we have until October 13th to file an NOPP
10 indicating that change. If we want to continue or
11 intend to continue with what we've already filed, then
12 there is no action required on October 13th. We just --
13 - we just go down the green path here to achieve the
14 compliance based on what we filed with EPA and DEP.

15 COMMISSIONER RANEY:

16 Okay. Thank you. I have nothing
17 further, Madam Chairman.

18 CHAIR:

19 Okay. Mr. Spitznogle, you're going to
20 have to be more elementary with me than you were with
21 Mr. Raney. Okay. So let's assume that the Commission
22 issues an Order before October 13th saying that the
23 Commission wants AEP to go full speed ahead with ELG and
24 CCR on all three plants and bear --- the West Virginia
25 ratepayers bear all the costs. What does AEP have to do

1 to comply with that?

2 A. We'd have to execute the plans that we've
3 already filed.

4 CHAIR:

5 And what are those plans?

6 A. To construct the bottom ash transport
7 conversion to dry, to close the current ones that
8 contain ash, and there's other valves of plant
9 modification to support this, the changes, and to
10 install the vital reactor system on the FGD wastewater
11 stream to clean up that, according to that technology
12 standard.

13 CHAIR:

14 See I got sort of lost in the maze of
15 this exhibit. So you have already filed certain permits
16 that already put you on that path?

17 A. That is correct.

18 CHAIR:

19 And so if we issue an Order okaying the
20 cost component of this, then what do you have to do?

21 A. We just continue with our project to construct
22 these ---.

23 CHAIR:

24 And you don't have to file anything
25 else with DEP?

1 A. That is correct.

2 CHAIR:

3 Okay. So let's assume we do that. Can
4 AEP change its mind and decide not to follow the
5 Commission Order and stop these upgrades?

6 A. I know this is an eye chart of sorts, but that
7 would be the white diamond path, which would lead to
8 near-term closure of the power plant, either retire it
9 or refuel.

10 CHAIR:

11 And would you assume that if --- if the
12 Commission okayed these upgrades and AEP decided not to
13 do the upgrades, that that would take further Commission
14 approval to not do the upgrades?

15 A. I don't know how the West Virginia process
16 works, so I can't answer that. But we would be
17 committed to doing the plan unless something changed
18 that led to the closure of the plant.

19 CHAIR:

20 So is the process already in the works
21 to do all of the DEP permits that are necessary to do
22 the ELG and the CCR at all three plants?

23 A. Yes.

24 CHAIR:

25 Okay. I don't have any further

1 questions. Ms. Blankenship, do you have any?

2 ATTORNEY BLANKENSHIP:

3 I have a few. Thank you.

4 REDIRECT EXAMINATION

5 BY ATTORNEY BLANKENSHIP:

6 Q. Mr. Spitznogle, let's go back to some of the
7 questions you received early on from the Sierra Club
8 about the FGD membrane filtration technology. Do you
9 recall those questions?

10 A. I do.

11 Q. And I believe, Sierra Club, you said it's
12 Number 1, is an EPA document. It's a technical support
13 document for the ELG guidelines and it includes a
14 discussion about the FGD membrane infiltration. Did the
15 Companies look at this as an option to comply with the
16 ELG requirements?

17 A. We did, yes.

18 Q. And at what point in the process? Was it
19 pretty early on or ---?

20 A. It was pretty early on. It's been a little
21 bit. It's been a little while now.

22 Q. Okay.

23 And just to make the record clear, the FGD is
24 one of the waste streams, one of two; is that correct?

25 A. That's correct.

1 Q. So this membrane filtration technology applies
2 to one of two waste streams that are subject to the ELG
3 rules?

4 A. That is correct.

5 Q. And the membrane infiltration technology is an
6 option to meet the ELG rules.

7 Is that correct?

8 A. It is part ---. So we're exchanging basically
9 a longer time frame to come into compliance with the FGD
10 waste stream in exchange ---.

11 Q. And EPA found that it wasn't going to be an
12 actual requirement, but it was an option that the
13 Company could choose, not a requirement?

14 A. That's right. As of the last rulemaking, it
15 was an option.

16 Q. And in fact, EPA is reconsidering, has issued a
17 proposal that has said --- and this has been since the
18 2020 rule came out, which we're talking about --- that
19 says, hey, we're going to go back and look at this a
20 little bit more closely, the membrane technology; is
21 that correct?

22 A. That is correct, yes.

23 Q. Okay. And then I believe you testified that
24 the concern that the Company had was that this
25 technology hadn't been proven on a full-scale

1 application for coal-fired facilities like the three
2 that we're talking about here; is that correct?

3 A. Yes. I was talking more broadly, anywhere in
4 the U.S.

5 Q. Okay. Thank you. I think that's all that I
6 have on that. Let's move on to talk about the
7 Companies' existing NPDES permit that were applied for
8 with the West Virginia Department of Environmental
9 Protection or the DEP. I believe you testified that
10 there are three, one for each facility. For Amos, you
11 have a final permit, and Mitchell and Mountaineer,
12 they're still in draft permit state; is that correct?

13 A. That is correct.

14 Q. You got a number of questions about how the
15 permits fit into the ELG rules, which have provisions
16 and we talked about those. Again, these are the EPA
17 regulations that allow for transfers among different
18 scenarios, including if an NOPP is filed.

19 Is that correct?

20 A. We talked about those scenarios, yes.

21 Q. Right. So with regard to your specific
22 permits, your Amos permit actually states that in order
23 to file an NOPP, you're going to have to get a permit
24 modification from the DEP; is that correct?

25 A. Yes. Following an NOPP filing, you enter into

1 a permit modification.

2 Q. So again, as your permit stands now, it doesn't
3 even allow for an opportunity to file an NOPP unless a
4 permit modification is also filed; correct?

5 A. Well, it's a chicken and egg thing. We have to
6 file the NOPP first, and that triggers action that
7 includes a permit modification, the new path that we're
8 filing for.

9 Q. Okay. And we talked about permit modifications
10 a lot, but really not about what does that mean. Can
11 you explain to the Commissioners and the parties what
12 all that entails? Is it just as simple as asking for
13 something and turning around and getting it? Is there a
14 process? Can you give us a little bit of insight into
15 what a permit modification would entail, including the
16 timing?

17 A. Yes. So when we file for a permit
18 modification, DEP has to consider our filing and then
19 draft language that meets the intent on what we
20 requested. And then that draft that they propose has to
21 be put in the public domain for a period of time for the
22 public to review it, to comment on it, and to help
23 provide more input into the direction that the permit
24 should go. Once that public comment period is closed,
25 then the DEP has to assemble all the information they've

1 collected, consider it, and finalize the permit. So
2 it's a multistep process that involves intervention from
3 the public.

4 And the quickest that we know that this can
5 take place is about 90 to a hundred days. It takes
6 about 30 days for DEP to review our request and draft
7 permit language. Then it takes, well, 35, 45 days to
8 put public notice of the permit in local newspapers, and
9 then allow for public comment. So that's another 30 to
10 45 days. And then about 30 days for the final revision
11 issuance of the permit.

12 Q. And would you say that 90 to a hundred days
13 scenario would be best-case scenario if there's no
14 glitches, everything's done properly, there are no
15 adverse issues for the DEP to deal with outside of just
16 a pretty straight and narrow seamless path?

17 A. Yes. Those numbers are moving quickly.

18 Q. And when the public comments, does the DEP
19 actually take the time to respond to those comments and
20 the issuance of the draft permit?

21 A. I'm not sure how they respond to public
22 comments, but they do have to consider every public
23 comment.

24 Q. Switch gears just a little bit. And again, I
25 just want the Commission and the parties to kind of

1 understand, because this is so complicated. The ELG
2 regulation apply to two different waste streams, the FGD
3 and the bottom ash transport; correct?

4 A. That is correct.

5 Q. Can you describe a little bit more, because I'm
6 not sure it's clear on the record, the significance of
7 why that matters? There's two different waste streams.
8 You've got two different timelines. If we ask for
9 something to change, it's not quite so simple.

10 A. Yes. We do have two time frames.
11 Particularly, it becomes more apparent when you step
12 into the VIP process or one of these voluntary programs,
13 because now you're looking at separating the dates
14 between either part or between the bottom ash transport
15 water appliance, which is as soon as possible, but no
16 later than December 31st of 2025. That's
17 established in our EPA filings and that's what's
18 reiterated and agreed to by DEP, at least our Amos
19 permit. And it reflects that in our draft permits and
20 initials.

21 The other portion of the ELG compliance
22 obligation is the FGD wastewater stream. And under the
23 other revisions like the VIP, you have longer time to
24 come into compliance with that provision, presumably
25 because it's a technology --- will take longer to store.

1 But that extra time does not buy you a full ELG
2 compliance shift in deadline. You still have transport
3 water obligations that are already defined in our
4 permits.

5 Q. So complying with one waste stream regulation
6 doesn't apply to the whole package? You have to comply
7 with several?

8 A. You do, yes. You've got to look at time
9 frames. You have to meet the deadlines for both of
10 those.

11 Q. Okay. Thank you. I next want to turn to this
12 federal register notice that contains the applicable
13 regulations that we've been talking about. Just to
14 clear up the record, there were limited portions of the
15 regulation asked about and read into the record by other
16 Counsel.

17 So I'll ask you to turn --- and I apologize.
18 I'm just going to give you the page number. Again, this
19 is the CFR. We've got two different versions. I think
20 this one I'm looking at is CAD Cross Exam Number 2. And
21 if you look on page 64719, I'll start there. And I'm
22 looking at section (o)(1).

23 A. Okay.

24 Q. It starts where transfer between applicable
25 limitations in a permit. And this is the section where

1 you've been questioned about what does the rule allow a
2 company to do to go back and forth when decisions are
3 made. That section actually has a caveat in it. And
4 I'll just ask you to read that, so we have it in the
5 record. Just that very first paragraph before (i)(1).
6 Did you follow or do I need to repeat?

7 A. Yeah. I'm lost in those.

8 Q. So I'm looking at (o)(1), transfer between
9 applicable limitations in a permit.

10 A. Okay.

11 Q. Can you just read that next sentence in that
12 section that starts out where in the permit?

13 A. Okay. Where in the permit, the permitting
14 authority has included alternative limits subject to
15 eligibility requirements, upon timely notification to
16 the permitting authority under 423.19(i). A facility
17 can become subject to the alternative limits under the
18 following circumstances.

19 Q. So make this make sense for everybody. Who was
20 the permitting authority in this case?

21 A. I believe the DEP.

22 Q. And so that sentence, we go back and we talk
23 about how your DEP permits don't have flexible --- the
24 ones that are in the state that they're in right now,
25 your existing current permits, require that you have to

1 get a major modification for an NOPP. So is that
2 referring back to this caveat, that in order to
3 transfer ---? And you had talked about this. I'm just
4 trying to make the record clear. The EPA rules allow
5 for transfer, but only if the permitting authority, DEP
6 in this case, has allowed that flexibility in your
7 current permit?

8 A. That is correct.

9 Q. Thank you. Okay. Now, I want to switch over
10 to this CAD Exhibit Number 1, which is the 2020 steam
11 electric reconsideration rule.

12 A. Okay.

13 Q. I believe on page 21 to 23 there were some
14 examples given as to how scenarios may play out if you
15 apply the different transfer options under the
16 regulation we were just talking about. And you were
17 asked to sort of read that and give your opinion on
18 them. Would you say that these are general examples
19 that the EPA has given to sort of help the public
20 understand how these transfer regulations work?

21 A. That's the way I read these. I don't see
22 specifics about a state or a jurisdiction.

23 Q. So these don't necessarily apply to West
24 Virginia regulations or DEP or the West Virginia Public
25 Service Commission; is that correct?

1 A. I don't see any connection.

2 Q. And you were testifying generally not
3 specifically to West Virginia, and what may or may not
4 be approved or may or may not be required for a plant to
5 retire; is that correct?

6 A. I was just reading the sentence where it talks
7 about NERC region, and the PUC disapproval of
8 retirement.

9 Q. So you weren't speaking specifically on behalf
10 of the Company or the Companies?

11 A. No. I was just elaborating on my
12 interpretation of this example.

13 Q. Okay. Thank you. Just one more question. And
14 this is just a general question, because I think you had
15 a lot of questions. Typically this can happen in a
16 hearing, with multiple witnesses that may have crossed
17 over into someone else's issue or something that's
18 outside of the participation or your experience involved
19 in this case. So I just want to make clear, you've had
20 a lot of questions about retirement and could the
21 Company retire under this scenario or that scenario.
22 Just for the record and for the Commission's
23 clarification, your responses were limited to the
24 environmental compliance regulations, the chart that you
25 put together. Your answers were based on that

1 perspective, not whether or not cost recovery is going
2 to be allowed; is that correct?

3 A. That's correct. My answers were in the context
4 of what the rule allows and does not allow, generally,
5 not specifically how any of the companies need to
6 respond to that.

7 Q. Or whether or not we get cost recovery?

8 A. That's correct.

9 ATTORNEY BLANKENSHIP:

10 That's all I have.

11 CHAIR:

12 Okay. Thank you. Mr. Spitznogle, you
13 may be excused. And with that, we will take our lunch
14 break. And because it's sort of difficult to get lunch
15 around here, we will break until 1:30.

16 ATTORNEY WILLIAMS:

17 Your Honor, before we break, I have one
18 question. I can make the entire body of the federal
19 register I referred to a part of the record if you want
20 to have that. I asked you earlier to take
21 administrative notice of it, but I can make that
22 available by the
23 PDF ---.

24 CHAIR:

25 How big is it?

1 ATTORNEY WILLIAMS:

2 Almost about --- I don't know. I think
3 it's about 78 pages or so.

4 CHAIR:

5 I think taking administrative notice is
6 sufficient.

7 ATTORNEY WILLIAMS:

8 Okay. That's fine.

9 CHAIR:

10 Okay. And to the extent that we had
11 Cross Examination exhibits and they were not admitted
12 into the record, we admit them into the record. And
13 with that, we will be back here at 1:30.

14 LUNCH BREAK TAKEN

15 CHAIR:

16 It looks as if everyone is here, so we
17 will get started. Jennifer, do you want to swear in the
18 witness?

19 -----

20 -

21 RANDALL SHORT, HAVING FIRST BEEN DULY SWORN, TESTIFIED
22 AS FOLLOWS:

23 -----

24 -

25 ATTORNEY FISHER:

1 May I proceed, Your Honor?

2 CHAIR:

3 Yes, you may.

4 DIRECT EXAMINATION

5 BY ATTORNEY FISHER:

6 Q. Mr. Short, can you please state your name, your
7 business address, and your position for the record,
8 please?

9 A. Yes. My name is Randy Short. I'm the Director
10 of Regulatory Services for Appalachian Power Company.
11 My business address is 500 Lee Street, East, Charleston,
12 West Virginia.

13 Q. Did you submit Supplemental Direct Testimony in
14 connection with the Companies' petition to retire ---?

15 A. Yes, I did.

16 Q. Do you have a copy of that Supplemental Direct
17 Testimony with you today?

18 A. Yes, I do.

19 Q. Does that Supplemental Direct Testimony consist
20 of 12 pages of questions and answers, and does it have
21 on the first page the caption Company Exhibit RRS-SC?

22 A. Yes.

23 Q. Do you have any additions, deletions,
24 corrections or clarifications to make to that
25 Supplemental Direct Testimony?

1 A. I have one minor correction ---.

2 Q. Could you please tell us what that change is,
3 sir?

4 A. Yes. On page five on line 13, on my version,
5 line 13 starts with the word involvement with Mitchell,
6 should be used for the --- and then I would insert CCR
7 in front of the word depreciation. And for
8 clarification, looking back at the Kentucky Order,
9 they're speaking of the CCR depreciation and rate. And
10 I just want to make sure that's clear and so I'm adding
11 CCR to make this sentence more clear.

12 Q. Thank you. Do you have any other changes?

13 A. I do not.

14 Q. Taking into account those changes, if I were to
15 ask you the same questions contained in your prefiled
16 Supplemental Direct Testimony here today, would your
17 answers be substantially the same?

18 A. Yes, they would.

19 Q. Are those answers true and accurate to the best
20 of your knowledge, information and belief?

21 A. Yes, they are.

22 Q. Do you adopt your Supplemental Direct Testimony
23 as part of your evidence in this case?

24 A. Yes, I do.

25 ATTORNEY FISHER:

1 I would move for the admission of
2 Company Exhibit RRS-SD into the record and Mr. Short is
3 available for Cross. Thank you.

4 (Company's Exhibit RRS-SD was marked
5 for identification.)

6 CHAIR:

7 His testimony may have already been
8 admitted into the record, but just to make sure, we can
9 admit it into the record again.

10 ATTORNEY FISHER:

11 Thank you. My apologies.

12 CHAIR:

13 That's okay. WVEUG?

14 ATTORNEY NAUM:

15 Yes. Thank you, Your Honor.

16 CROSS EXAMINATION

17 BY ATTORNEY NAUM:

18 Q. Good afternoon, Mr. Short.

19 A. Good afternoon, Mr. Naum.

20 Q. First question. Just for background, in the
21 Companies' initial application in this proceeding, the
22 Companies' proposed consideration is two options. Would
23 you agree with that here?

24 A. Yes. The Company presented two alternatives to
25 the Commission.

1 Q. And those two options --- and I don't want to
2 belabor the point. Those two options would be CCR and
3 ELG investments at all three plants, and then two would
4 be CCR investments and ELG --- at the Mitchell plants.
5 I believe ---.

6 OFF RECORD DISCUSSION

7 BY ATTORNEY NAUM:

8 Q. So those two options again, just to recap, the
9 first option would be CCR and ELG investments at all
10 three plants; correct?

11 A. That is correct.

12 Q. And the second option would be only CCR
13 investments, but no ELG at the Mitchell plant.

14 Correct?

15 A. That is correct.

16 Q. In this case, is it fair that with the petition
17 for reconsideration were to reopen I should say, the
18 Companies are asking the Commission to consider a third
19 option, and that third option would be for West Virginia
20 ratepayers to fund all of the ELG investments at all
21 three plants. Is that fair?

22 A. This is alternative one. It's just an
23 assignment for the cost ---.

24 Q. Okay. So --- thank you. So let's just talk
25 about the Companies' specific request for relief, if we

1 may. On your testimony, you summarize what you believe
2 the Companies' request for relief are, beginning on page
3 one, line 18. The first request is a ruling from the
4 Commission that it, meaning the Commission --- is that
5 fair ---

6 A. That's correct.

7 Q. --- wants the Companies to proceed with the ELG
8 projects at all three plants. Is that one of the
9 requests?

10 A. Yes. The Commission's Order earlier through
11 ELG for all three plants --- that's confirmation of
12 that.

13 Q. Okay. The second --- acknowledgement from the
14 Commission that additional investments and O & M
15 expenses of the plants will be needed prior to 2028 and
16 will be the responsibility of West Virginia ratepayers.
17 Is that fair?

18 A. Yes, with our position to the Commission.

19 Q. Okay.

20 And in the third, you're asking for a
21 commitment from the Commission that it, again, the
22 Commission, will continue to authorize recovery of costs
23 described in items one and two above, so long as they're
24 reasonable and prudently-incurred, is that also correct?

25 A. That's correct.

1 Q. So the Companies' finding in your testimony,
2 you talk a lot about that AEP is asking for a ruling
3 from the Commission on what the Commission wants, but
4 I'm curious what the Companies want in this case. Are
5 the Companies asking for West Virginia ratepayers to
6 bear the burden of all ELG costs at the three plants?

7 A. Companies are bringing back to the Commission
8 information that the Commission stated and ordered like
9 for the Companies to do if there's been a cost --- a
10 change in cost allocation or ownership based on
11 decisions and other Commissions, other jurisdictions.
12 If that has occurred, then we'll bring that information
13 back to the Commission.

14 Q. So in the initial application, the Companies
15 didn't make a recommendation as to which option the
16 Companies thought was most prudent. Is that right?

17 A. No, you're correct. The Companies presented
18 two alternatives and recognized the --- the charge of
19 this Commission and gave them the option to look at
20 those two alternatives. The Commission since ruled in
21 their Order that they issued that --- you know, the cost
22 benefit of doing this work is prudent and they find it -
23 -- you know, they want to go forward. And so now they
24 have information to bring that to the attention of the
25 Commission ---.

1 Q. But in this case, the Company is, again, not
2 making a recommendation that the Commission take a
3 specific action?

4 A. That's correct.

5 Q. In the initial application proceeding, Mr.
6 Short, the Companies indicated that investments in ELG
7 costs at Mitchell and keeping Mitchell open beyond 2028
8 was of marginal benefit, at best, to the ratepayers. Is
9 that a fair representation of the Companies' analysis in
10 the application?

11 A. Specifically or as a generalization ---?

12 Q. Just in general. Just a general statement from
13 the application. It's all in the record of this case
14 and you can probably go back, and I do have the
15 transcript, if you'd like me to. But just a general
16 statement that the Companies believe that it was of
17 marginal economic benefit to ratepayers to invest in ELG
18 costs at Mitchell?

19 A. I think the analysis showed that it was
20 marginal benefits in the investment.

21 Q. Okay. With this Petition to Reopen, are the
22 Companies now asserting that having West Virginia
23 ratepayers pay for ELG costs at all three plants might
24 somehow be economically-beneficial to them?

25 A. The Companies are not taking a position there.

1 The Companies brought forth their information to the
2 Commission, as the Commission asked us to do, based on
3 changes made by jurisdictions of other Commissions.

4 Q. So you take no position as to whether that's
5 economically-beneficial to ratepayers?

6 A. No. I think that's already been decided by
7 this Commission. They said that regardless of ownership
8 of the plants, they felt it was cost-beneficial due to
9 the work at all three plants, both CCR and ELG, and were
10 obtaining new information.

11 Q. Is that your legal interpretation of the Order?

12 ATTORNEY FISHER:

13 Objection. That calls for legal
14 opinion.

15 BY ATTORNEY NAUM:

16 Q. Are you an attorney, Mr. Short?

17 A. I am not.

18 Q. Does AEP believe that it's a prudent decision
19 to acquire the other 50 percent of initial interest?

20 A. We have not taken a position on that.

21 Q. Since you're the witness representing the
22 Companies under oath, do you personally believe that it
23 would be a prudent decision for the Companies to acquire
24 the remaining 50 percent of the Mitchell plant?

25 A. I do not have a personal position.

1 Q. So if neither you nor the Companies have a
2 position on the prudence of that acquisition, why even
3 raise it at this point?

4 A. I don't know that I raised the prudence ---.

5 Q. Well, the Companies have made a filing asking
6 the Commission --- again, to restate it, asking the
7 Commission for a ruling that it --- the Companies to
8 proceed with ELG projects at all three plants, including
9 Kentucky Power Company's undivided 50 percent interest
10 in the Mitchell plant. And then also in the request
11 itself, the Petition to Reopen. You're familiar with
12 it, Mr. Short?

13 A. Yes.

14 Q. Number four on page five of the petition asks
15 for instructions from the Commission that Wheeling Power
16 propose a plan in a future docket that recognizes the
17 changes needed to deal with the issues resulting from
18 any directive from this Commission to perform the ELG
19 work at Mitchell. Could that include the purchase of
20 the remaining 50 percent of the Mitchell plant?

21 A. Could you repeat that, please?

22 Q. Could that request for relief in the Companies'
23 petition include the potential for Wheeling Power to
24 acquire the remaining 50 percent of the Mitchell plant?

25 A. There is a possibility that Wheeling Power

1 could acquire the plant in the future.

2 Q. If AEP or the Companies thought that that would
3 be independently prudent, they could file an application
4 for certificate to make that acquisition, could they
5 not?

6 A. I'm not sure.

7 Q. Okay. Does AEP currently have a need for the
8 additional capacity from the remaining 50 percent of the
9 Mitchell plant?

10 A. When you say need, you mean Appalachian Power,
11 Wheeling Power ---?

12 Q. Yeah, no. That's a good clarification. Does
13 AEP's West Virginia companies, Appalachian Power and
14 Wheeling Power, to serve West Virginia customers, have a
15 need for the additional capacity represented by 50
16 percent of the Mitchell plant?

17 A. Currently, our --- generation we have we're
18 looking at a date at some point in the future, sometime
19 between 2028 and forward, so that make a projection of
20 what the need would be at that time.

21 Q. At that time, would AEP or is AEP considering
22 the issuance of a competitive RFP to meet that potential
23 capacity need?

24 A. So vis-à-vis the 2020 rule, Appalachian Power
25 would be issuing an RFP to meet capacity if they do not

1 have that capacity ---?

2 Q. Correct.

3 A. Not currently. We're not to that point or
4 place yet at this time.

5 Q. To your knowledge, Mr. Short, have the
6 Companies ever considered the potential value of selling
7 the Mitchell plant to a third party?

8 A. I know there's been a public statement on
9 what's being evaluated. I know they're currently
10 evaluating options for that plant. That's about as much
11 as I know at this point.

12 Q. Okay. Would you agree that if this Commission
13 ultimately determined that West Virginia ratepayers
14 should pay for all of the ELG costs at the three plants,
15 that West Virginia ratepayers would be facilitating the
16 operation of those plants beyond 2028?

17 A. In order for the plants to remain operating
18 past 2028, it would be necessary for a new ELG order.

19 Q. So if West Virginia ratepayers were required to
20 pay for that, then they would be facilitating methods
21 and the operation; correct?

22 A. That is correct.

23 Q. To your knowledge, has AEP ever calculated the
24 value of the capacity and energy that might be provided
25 to Kentucky and Virginia ratepayers in the event that

1 West Virginia ratepayers were to facilitate the ongoing
2 operation of those two plants?

3 A. No. I mean, at this time, the ELG Order is for
4 perform --- to serve the West Virginia customers. If at
5 some point in the future there is a way to produce
6 excess capacity --- in the event we do that, we would
7 modify this.

8 Q. So there's no data in this proceeding that
9 would inform the Commission what benefit West Virginia
10 ratepayers might be providing to Kentucky and Virginia
11 in that instance?

12 A. We would be providing no benefit unless they
13 paid for it. It's not something that they would be
14 running for free on capacity or energy from those
15 plants. So I do not see there is a benefit to them. The
16 benefit would be to the West Virginia customers.

17 Q. But Mr. Short, if those plants continue
18 operating past 2028 and provide energy and capacity to
19 Virginia and Kentucky, are you saying that there's no
20 benefit provided to those ratepayers in those states?

21 A. I assume that the Commission in this case would
22 decide what's the best action to the customers in this
23 case and how it affects them if they procure energy
24 capacity from those plants.

25 Q. The Companies, again, are asking for an

1 acknowledgement from the Commission that additional
2 investments in the O & M expenses at the plants will be
3 needed prior to 2028, and that this would be the
4 responsibility of West Virginia ratepayers. Mr. Short,
5 does --- do the Companies believe that it is reasonable
6 for the West Virginia ratepayers to pay those ongoing
7 additional investments and expenses in O & M at those
8 plants?

9 A. What I'm referring to the O & M expenses would
10 be in addition to anything to keep the plant open
11 through 2028. So if it's a desire to keep the plant
12 open past 2028 and those O & M expenses allow that to
13 happen, yes, that would be the responsibility of West
14 Virginia customers.

15 Q. And you think that's reasonable?

16 A. I do.

17 Q. And what would those O & M expenses be?

18 A. I don't have a specific example, but I can give
19 you a generic example. You know, if there's something
20 that's needed, something needs to be replaced or rebuilt
21 that would last through 2028, but now it will not last
22 through 2028 --- it will have to last beyond then, that
23 would be an expense in addition to what would happen if
24 the plant would close in 2028.

25 Q. So for an example, if Amos had to replace a

1 turbine in 2027, do you believe it would be reasonable
2 for West Virginia ratepayers to front the costs of that
3 turbine replacement so the plant can operate after 2028?

4 A. I think with that being an investment, the
5 plant would not operate, so that would not be a prudent
6 decision to not make the investment. I'm sorry. If you
7 can ---.

8 Q. I was following you. And do you have any idea
9 what the potential costs might be to West Virginia
10 ratepayers to pay O & M costs at three plants beyond
11 2028?

12 A. I do not have those cost estimates.

13 Q. That's not anywhere in the record, is it?

14 A. I mean, there's analysis in the Mitchell filing
15 by Mr. Martin that laid out several different scenarios
16 where if you perform, you know, CCR and ELG at each of
17 the plants or an either CCR or ELG pricing scenarios,
18 what the stream of revenue requirement would be ---.
19 I'm not sure what all information is possible, something
20 in the record. But I can't point to a specific number
21 in his testimony and say, here's where he included,
22 potentially, a future O & M or a future revenue at those
23 plants, that no assumptions were made. As accurate
24 estimate as possible of what the cost would be going
25 forward, you apply some of those different investment

1 scenarios and different economic environments.

2 Q. But if we don't have a clear understanding of
3 what that data is, how can the Commission today
4 predetermine that forcing West Virginia ratepayers to
5 bear those costs would be reasonable?

6 A. I think the West Virginia Commission will look
7 at the decisions they made, and were they issues, were
8 they approved. At that time they also did not know what
9 costs may come up in the future or what changes in
10 regulations may happen in the future and the CCR and
11 ELG ---.

12 And we're back to then setting the two open
13 jurisdictions at this time and not approve ELG. The
14 Virginia Commission has not approved ELG at this time,
15 but they dismissed the case without prejudice and we are
16 planning to refile in Virginia probably the first
17 quarter of next year, another attempt at recovering ELG
18 expenses. So there's still some unknowns. You're
19 exactly right about that. All three Commissions both
20 CCR and ELG ---. We cannot guarantee that that is the
21 only future investment we'd ever had to make among the
22 plants.

23 Q. But if those investments in O & M costs reach
24 say \$150,000,000, it's your testimony that it's prudent
25 and reasonable for West Virginia ratepayers to pay all

1 of those costs. Is that right?

2 A. I think at some point if an investment is
3 marginally keeping the plant running, the people will
4 have to make decisions, is there an alternative at that
5 time? You can keep on the sliding scale if the price is
6 right. Is \$150,000,000 too much? Is \$50,000,000 too
7 much? You know, I think all of these if you look at the
8 cost of operations, at some point you look and say, is
9 there a better alternative. And I mean, this Commission
10 looks at the balances. They will decide, is that still
11 the best alternative?

12 Q. But at this point, all we can do is speculate;
13 correct?

14 A. Any time we look into the future, all we can do
15 is speculate.

16 Q. On page six of your testimony, you state that
17 even if the Commission lets the Companies do all ELG
18 work at all three plants, the Companies will have to,
19 quote, file additional information and, quote, seek more
20 specific approvals of cost allocation and ownership.
21 Mr. Short, what additional information would that be?

22 A. Well, as you know, West Virginia ---
23 Mountaineer and Amos are owned by Appalachian Power
24 Company. The Mitchell plant is owned through Wheeling
25 Power Company and Kentucky Power Company. The Kentucky

1 Commission does not say to do --- these actions, they do
2 not do ELG work at that plant. In order to proceed
3 forward doing that work, you're going to have to do a
4 determination of ownership of the plant or permission
5 to do the work. So there's a possibility we will have
6 to bring additional information back to this Commission,
7 if there's a change in ownership or the determination of
8 how long and Kentucky Power is going to be a part owner
9 of that plant.

10 Q. And so we don't have that additional
11 information today, do we?

12 A. We do not and nor did the Commission ---. This
13 is something that will be decided.

14 Q. But yet the Companies still want the Commission
15 to determine today that it's appropriate for West
16 Virginia ratepayers to bear those costs?

17 A. The Companies want the Commission to affirm
18 their earlier decision that ELG work is in the interest
19 of the State of West Virginia, the ratepayers and the
20 Company based on this additional information that was
21 brought to them.

22 Q. But we already established in the initial
23 application that this option three of West Virginia
24 ratepayers paying the way of all the states wasn't even
25 raised. Isn't that right?

1 A. It was not raised at that time because at that
2 time we had an application pending for three
3 jurisdictions. And we since that time have vetted
4 decisions from two other jurisdictions that are counters
5 to what this West Virginia Commission decided. So based
6 upon that, that is not information this Commission had
7 at the time they made their decision. And they
8 explicitly, in their Order, said, you know, Virginia's
9 ownership allocations, that information should be
10 brought back to the Commission.

11 Q. Let's talk about that, because you did mention
12 that on page nine. You do state --- turn there. You
13 make that statement on lines 21 to 23, that the
14 Commission's Order, Mr. Short, specifically said that
15 the Companies should do that, and I quote, in a future
16 proceeding; isn't that correct?

17 A. That's correct.

18 Q. And that's not included in your testimony?

19 A. I don't think that's a direct quote --- I don't
20 see that as a direct quote from me.

21 Q. That's fair. Going back to page six of your
22 testimony, you state that the Companies now have updated
23 cost estimates based on more current information. What
24 information is that? Is that the information that we
25 now have from the Kentucky and Virginia Commissions? Is

1 that what you're referring to?

2 A. I'm referring to two things. I think at the
3 time the Companies were working in 2020 on cost
4 estimates in order to submit a plan and decide what
5 course of action to submit for approval. At that time
6 we were relying on engineering estimates, you know, an
7 outside engineering firm estimates, and what it could
8 cost to do the work. I think anyone who has monitored
9 building materials, fuel costs, anything over the last
10 year have seen a significant spike in prices There's
11 been a spike in labor costs. And so part of the change
12 in estimates are as we go further along we've got to
13 move engineer estimates to a more concrete estimate for
14 the process. We have better knowledge than we did. So
15 that's I think the lion's share of the increase in the
16 total cost ---.

17 Q. So where might we find the detail of those ---
18 of those cost changes?

19 A. We have not provided that. This is an estimate
20 where we think we are at this time. We are not seeking
21 a change in cost recovery, but we are informing the
22 Commission this is better information we have at this
23 time than when we had when we previously submitted our
24 application.

25 Q. But you still want the Commission to determine

1 that West Virginia ratepayers should pay for all of it;
2 correct?

3 A. Well, we're not asking for a change in rates
4 and surcharge to go into effect. Each year we'll file
5 cost information on what we have spent and a record will
6 be made at that time and it will be reviewed the parties
7 and the Commission.

8 Q. But if the Commission grants that request that
9 additional investments will be the responsibility of
10 West Virginia customers, and then provides, as you say,
11 a commitment that the Commission will authorize recovery
12 of those costs, what possibly is left to determine in a
13 future case?

14 A. Well, I think it would be disingenuous at this
15 point if we came forward and said the only information
16 we provided to the Commission --- even though the Order
17 does say --- there's been changes in ownership or cost
18 allocations, we now have better estimates on what it's
19 going to cost, I thought the Commission should be
20 comprised of that information to help them.

21 Q. So why ask for the Commission to predetermine
22 that West Virginia should pay for it?

23 A. Like I said ---. Like I said, we go in front
24 of the Commission to recover these costs as long as they
25 are reasonable and prudently-incurred. So it's a cost

1 estimate. And if someone evaluating this cost has a
2 question about the prudence of it, the Commission will
3 make a determination at that point. But I think it's
4 still best to give them our more accurate estimate now
5 of what the total costs would be.

6 Q. Okay. I won't belabor that. You reference
7 here --- on your testimony, you've mentioned here a
8 little bit today the concept of jurisdictional cost
9 recovery of expenses in both Virginia and Kentucky. And
10 I can point you to page five, where there's some
11 discussion of those jurisdiction cost-recovery issues.
12 Mr. Short, what makes --- what makes cost jurisdictional
13 in Kentucky or Virginia ---?

14 A. There can be different ways costs are
15 jurisdictional. There can be a sign based on factors.
16 It can be level of investment. It can be sales. It can
17 be models of something. Or it can be, as with the
18 Mitchell plant, a simple 50/50 allocation between the
19 two jurisdictions.

20 Q. So it could be a shared-capacity output from
21 those plants as well?

22 A. Sure. You know, you could have multiple
23 factors to determine the allocation factor.

24 Q. In your opinion, Mr. Short, can costs that are
25 caused by ratepayers in a single state and allocatable

1 to those customers in that other jurisdiction ever
2 consider to be reasonably and prudently-incurred for
3 purposes of cost recovery from West Virginia customers?

4 A. I'm sorry, could you break it down? I missed
5 the first part of the question.

6 Q. Costs that are jurisdictional, to say Virginia,
7 that are caused by those customers, in your opinion, is
8 it ever reasonable or prudent for West Virginia
9 customers to pay those costs?

10 A. I think the desire of setting rates to try to
11 assign costs to ---. I'm not saying there would be
12 instances in which they would qualify someone. These
13 allocations are not locked down, they're fluid and
14 change over time. One shifts from one state to another.

15 A large industrial customer in one state --- so
16 temporarily recouping costs that would cause to benefit
17 one state initially, and then be picked up by another
18 state to a future proceeding or attempt to allocate.

19 So I believe you could say that wouldn't happen
20 because we don't just --- every dollar you spend, you
21 don't say, you're always responsible for 41 cents, that
22 will be your responsibility here. Situations change
23 between rate cases, between other rate case proceedings.

24 Q. To your knowledge, what West Virginia
25 jurisdictional costs do the Companies currently attempt

1 to recover from Kentucky or Virginia ratepayers?

2 A. I think the relationship between Kentucky
3 ratepayers is that the costs are incurred at the --- at
4 the Mitchell plant. They are split 50/50. So there's
5 an operating agreement on how those costs are assigned.

6 And I'm not sure if that answers your questions, but --
7 -.

8 Q. Do the Companies recover any West Virginia
9 jurisdictional costs for Kentucky ratepayers?

10 A. I don't want to get too far into the final
11 jurisdictional referral and transmission costs and the
12 way they're assigned. So I'm not sure if that's what
13 you're asking. There could be costs that appear to be
14 located in West Virginia that added something to ---
15 either to Kentucky customers or to --- or that were
16 picked up by Kentucky customers.

17 Q. Do Kentucky customers pay for any environmental
18 improvements at West Virginia plants that are
19 jurisdictional to West Virginia?

20 A. I would think they pay 50 percent environmental
21 costs of the Mitchell plant.

22 Q. And those would be Kentucky jurisdictional
23 costs; right?

24 A. Correct.

25 Q. Well, we're --- yeah, okay. Thank you. Not

1 West Virginia jurisdictional costs?

2 A. No. We would take 50 percent shares on a
3 jurisdictional basis.

4 Q. Let's assume, Mr. Short, that the Commission
5 ultimately disagrees to give the Companies an
6 acknowledgement that these costs are the burden of West
7 Virginia ratepayers and refuses to give the commitment
8 that you're looking for. What will AEP do instead?

9 A. Well, I do not speak for AEP, but I think this
10 is important information that is needed for them to make
11 a final decision. And in the time frame we believe is
12 necessary before October 13th --- but it's not my
13 ultimate decision what they do.

14 Q. So you're not able to say what the Companies
15 might do if the Commission disallows a predetermination
16 of cost responsibility?

17 A. No, that's not my determination.

18 Q. Mr. Short, are you aware of AEP's corporate
19 renewable or clean energy goals?

20 A. General ones, yes.

21 Q. In the initial application proceeding, WVEUG
22 asks on discovery regarding the Guggenheim Roadshow and
23 the first quarter earnings release presentation. Do you
24 recall that from the initial presentation?

25 A. It's probably dangerous to say yes. I knew

1 WVEUG had some questions --- but I was not aware of the
2 presentation at that time. My knowledge would be
3 more various answers ---.

4 Q. Have you reviewed those documents at all?

5 A. I have not.

6 Q. Are you aware that AEP has a corporate clean
7 energy goal of --- I'll get the number for you. And if
8 the answer is no, you're not aware of it, that's fine.

9 A. I'm aware of general terms, but I cannot speak
10 to the specific number of the goal.

11 Q. Does 80 percent by 2030 sound correct?

12 A. I do not know.

13 Q. In your opinion, how does keeping the Amos,
14 Mountaineer and Mitchell plants open beyond 2028 support
15 AEP's corporate clean energy and renewable goals?

16 A. I think AEP is looking to meet the corporate
17 goals. They look for the opportunities that would make
18 the most sense for them based on timing and customer
19 jurisdictions. I do not believe at any point it's going
20 to a hundred percent at some point in the near future.
21 So there will be a path forward and they have a multiple
22 to be a hundred percent. If they said we were going to
23 be at a hundred percent tomorrow, then I guess we should
24 call them back, if that's not where they say they want
25 to be.

1 Q. Would you accept, subject to check, that AEP
2 has set a net zero goal by 2050?

3 A. Yes. Subject to check, I believe that's
4 correct.

5 Q. So if West Virginia ratepayers are forced to
6 pay for the survival of three coal plants, do you think
7 that can fit within that corporate clean energy bill?

8 A. You know, it's --- I think it can and this is
9 the option to keep the plants running through 2040. If
10 things change, and it's a possibility they will not run
11 through 2040, if things change otherwise, there's a
12 possibility they decide to go beyond there. It is a
13 goal. Goals are not set in stone. I believe it's the
14 goal of AEP. I think it's something they can work to.

15 ATTORNEY NAUM:

16 Okay. Thank you. That's all I have.

17 A. Thank you.

18 CHAIR:

19 Sierra?

20 ATTORNEY BECHER:

21 Thank you, Madam Chairman.

22 CROSS EXAMINATION

23 BY ATTORNEY BECHER:

24 Q. Good afternoon, Mr. Short.

25 A. Good afternoon.

1 Q. I want to get into a little more not
2 necessarily detail, but description of what costs may be
3 done in the future to keep these plants open. I believe
4 Barry had a discussion about that. I just want to
5 follow up a little bit. First of all, if it is a
6 requirement that Wheeling Power acquire the Mitchell
7 plant after 2028, I assume there will be some cost to
8 that?

9 A. The values --- it would be valued at zero.

10 Q. You honestly believe that that plant would be
11 valued at zero?

12 A. I think there could be arguments made for that.

13 Q. Describe those arguments.

14 A. If someone stated the plant could not run to
15 2028, it would have no value at that point.

16 Q. There would be no value of the metal at the
17 plant?

18 A. There could be value of metal at the plant, but
19 the cost to remove that metal is an issue we faced in
20 other plants that closed. Sometimes there's a cost to
21 the removal and sometimes there's different options.

22 Q. So you honestly have no idea what that cost
23 would be? It could be negative. It could be
24 significant?

25 A. That is correct.

1 Q. And we had discussed, I think, in the --- there
2 was a discussion early in the proceeding about potential
3 carbon sequestration to meet department goals. If that
4 was done, that would be another expense that would have
5 to be done at Mitchell to be borne by West Virginia
6 ratepayers. Is that fair?

7 A. It could be an expense, but it also could be an
8 expense that could either be covered by credits from the
9 federal government or something else that could reduce
10 things to zero or maybe make it a positive benefit to
11 doing that. I can't say without any cost ---.

12 Q. And again, you haven't evaluated whether that
13 was going to be a significant cost or it could be a
14 significant negative cost to ratepayers?

15 A. That's correct. And I do not believe you
16 represented or asked me to do that work --- or something
17 proposed at this time.

18 Q. Right. But we had asked for commitments to
19 costs, reasonable and prudent, to recover all future
20 costs and that those costs are borne by West Virginia
21 ratepayers; correct?

22 A. That's correct.

23 Q. I was discussing with Mr. Spitznogle the
24 possibility of EPA changing ELG rules for membrane
25 filtration. Were you here for that discussion?

1 A. Yes, I was.

2 Q. If membrane filtration were required instead of
3 current plans to meet those ELGs, that would also be
4 something that would be borne by West Virginia
5 customers.

6 Is that correct?

7 A. I'm not real familiar with how those costs
8 would work ---.

9 Q. Yeah.

10 A. Would additional cost to keep the plant
11 operating seem to be prudent to be doing that? I assume
12 that would be covered ---.

13 Q. Obviously regular operation maintenance cost to
14 keep the plant going, those would also be the
15 responsibility of West Virginia ratepayers?

16 A. That's correct.

17 Q. I was a little confused, and I just want to
18 make it clear for the record what your testimony is on
19 the acquisition of Kentucky Power's share of the
20 Mitchell plant to keep it operating after 2028. It
21 seemed to me from your conversation with Mr. Naum that
22 you believe it's not certain that Wheeling Power will
23 acquire Kentucky Power's share of Mitchell?

24 A. I mean, there will be an analysis, there will
25 be due process looking at the --- evaluation of

1 Mitchell, Kentucky Power in the future. And that's
2 really as much as I know of that situation.

3 Q. Do you expect there to be an acquisition of
4 that Kentucky Power share by Wheeling Power in 2028 ---?

5 A. I do not know.

6 Q. Can you look at page 11 of your testimony,
7 please?

8 A. Okay.

9 Q. And beginning at line seven, you have a
10 sentence there. Initially, the operating agreement, and
11 I believe that's talking about a joint operating
12 agreement between Wheeling Power and Kentucky Power,
13 will need to be updated. And you say that there will
14 need --- there will also be a need to develop a path
15 WCOs or WPCOs, Wheeling Power's ownership of the entire
16 Mitchell plant after 2028. There you seem to recognize
17 that, in your own words, there's a need to develop a
18 path to ownership. Wouldn't that imply you think that
19 it is not even just likely, but a need that Wheeling
20 Power is going to acquire Mitchell?

21 A. I understood your question to be prior to
22 2028 ---.

23 Q. Okay. So you agree with me now that --- from
24 the record that if the Mitchell plant is going to keep
25 operating past 2028, there needs to be an acquisition of

1 Kentucky Power's share by Wheeling Power?

2 A. Yes.

3 Q. I want to go back to another statement you
4 said. I think you mentioned that there is going to be no
5 free ride for Kentucky or Virginia customers in this ---
6 with these upgrades. Now, Kentucky Power currently owns
7 50 percent; correct?

8 A. That's correct.

9 Q. And you're asking the Commission to get the
10 West Virginia customers to pay 100 percent of ELG
11 upgrades at Mitchell, including the Kentucky share.
12 Right?

13 A. Yes.

14 Q. And Kentucky is under no obligation to sell to
15 Wheeling; correct?

16 A. That is correct.

17 Q. And the Kentucky PSC would have to approve any
18 sale or acquisition of the 50-percent ownership of
19 Mitchell if the Wheeling Power Company were to acquire
20 it. Is that fair?

21 A. Yes, and other ---.

22 Q. So isn't it then a safe possibility that
23 Kentucky could say, okay, these upgrades were done for
24 free, either Kentucky Power decides to hold on to that
25 plant or Kentucky PSC decides to not allow the sale of

1 that plant?

2 A. That's a possibility.

3 Q. Okay. In that case, Kentucky would be getting
4 a free ride, wouldn't it?

5 A. I think there'd have to be a change in the
6 operating agreement for them to approve ---.

7 Q. Would Kentucky PSC have to approve any
8 operational agreement changes?

9 A. I assume yes, they would.

10 Q. Okay. And would they be under any obligation
11 to approve that, once ELG improvements and the money to
12 finance those were already committed and done?

13 A. Having to approve that, I don't think I agree.

14 Q. Moving to Virginia. You mentioned going back
15 to Virginia and asking for contributions to these ELG
16 improvements. You would only do that after this
17 Commission has ruled that Kentucky Power or that West
18 Virginia residents or West Virginia customers, rather,
19 would pay the full cost of those improvements at the
20 Amos and Mountaineer plants; correct?

21 A. Well, that's not a strategic plan or anything.
22 That is the law in Virginia. It does not allow us
23 to --- it would be just cause ---.

24 Q. Whatever the reason, you're not going to go
25 back to Virginia until after this Commission decides

1 that West Virginia customers have to pay the full share
2 of the improvements at Amos and Mountaineer; correct?

3 A. We're asking the Commission here if it wants to
4 make improvements that they will guarantee payment for
5 it, we will seek another attempt in Virginia to retain
6 those customers ---.

7 Q. You're asking for this Commission's decision
8 before October 13th?

9 A. We're asking for guidance from this Commission
10 before October 13th.

11 Q. You want a decision?

12 A. We'd like to have a decision. We'd like to
13 have the Commission have whatever is necessary to make
14 those decisions.

15 Q. And --- okay. So you want that by October
16 13th. And is it true that you will not be going back to
17 Virginia before December?

18 A. That is true. That's just merely to resolve
19 when we've have to make a declaration or a change
20 declaration to the West Virginia DEP and when it's the
21 actual filing in Virginia. Would we file earlier in
22 Virginia? I assume we would.

23 Q. So the Virginia State Corporation's Commission
24 won't have the opportunity to decide again whether their
25 customers should make adjustments until you get a

1 decision from this Commission that says all of those
2 costs should be borne by West Virginia customers?

3 A. I missed the first part of your question.

4 Q. I'm saying the Virginia State Corporation
5 Commission, Virginia SCC, won't have a chance to
6 consider whether their customers should contribute to
7 ELG costs at Amos and Mountaineer after you get a ruling
8 from this Commission that West Virginia customers should
9 pay for all of it?

10 A. That is correct. And that's the process of
11 having the cases in all three jurisdictions and somebody
12 went first, and somebody went second, somebody went
13 third. You know, the Commission went third. And we had
14 the ability to see what the Commission decided.
15 Kentucky went first. And so there's a timing there. I
16 don't know that the Decision has influenced the
17 Commission by what happened in another jurisdiction, but
18 I'm assuming that Virginia will look at it. Probably
19 what they stated in their Order was they did not feel
20 that the application stated the benefits of doing this
21 work.

22 They invited us make a presentation in the
23 future and file again. And with more information and
24 more look at an alternative to how they would acquire
25 capacity in the future, they may decide to choose an

1 option they want to pay for. If it's a better option,
2 they could turn to somewhere else.

3 Q. And let me ask you about that capacity issue
4 for Virginia. Now, APCo, Appalachian Power Company, has
5 FRR status --- correct?

6 A. That is correct.

7 Q. And that's the usefulness capacity, right, that
8 you meet that FRR requirement, especially ---. I guess
9 we just do the FRR requirements. But that's the value
10 of having capacity. You don't have to go through the
11 capacity option rules; correct?

12 A. That is correct.

13 Q. And right now both West Virginia and Virginia
14 take advantage of that FRR status; correct?

15 A. Yes, yes.

16 Q. And that's because it's part of the same
17 company, Appalachian Power; correct?

18 A. That's right. I understand that they
19 became ---. I've always said as much at this point, you
20 know, I think they will get the total requirements of
21 Appalachian Power and we're required to have capacity to
22 do that.

23 Q. And there's still a few requirements
24 Appalachian Power; correct; not Appalachian Power West
25 Virginia customers or Appalachian Power Virginia

1 customers?

2 A. That's correct.

3 Q. And so Virginia customers are getting an
4 advantage, because West Virginia customers --- they did
5 what you asked --- are footing higher bills to maintain
6 the capacity that grant you that FRR status for both
7 jurisdictions?

8 A. Not at this point, they're not. At this point,
9 you know, they are paying their share. They agree to
10 pay their share of CCR in order to keep the plants
11 operational through 2028 ---.

12 Q. So they are --- they've committed to their
13 share for CCR, but they have not committed to share ---?
14 In fact, they have said that at this point, Virginia
15 customers should not pay for the ELG upgrades at this
16 point; correct?

17 A. At this point they said we do not see the value
18 of it. And that's when they could possibly come back
19 and create a new record or something, give information
20 to show that it may be in the best interest of Virginia
21 for Virginia customers to pay their share.

22 Q. And again, I want to confirm that that FRR
23 status, that capacity, self-sufficient capacity status
24 that's granted to Appalachian Power as a whole; correct?

25 A. That is my understanding.

1 Q. Okay.

2 And I guess what I'm trying to understand is,
3 when you go back to Virginia and try to get Virginia
4 customers to pay for capacity, since they already have
5 it as part of Appalachian Power, what is your asking the
6 Virginia Commission?

7 A. I would ask them to pay their share of the
8 capacity. And the Virginia Commission will decide if
9 that's the fair thing for customers to do.

10 Q. And they will decide that knowing that that
11 capacity is already in place because of West Virginia
12 customers' rates?

13 A. Yes.

14 Q. Now, as you went over with Mr. Naum, there were
15 a couple of different options that were presented to the
16 Commission, correct, in the initial filing?

17 A. That's right.

18 Q. And one of those was to do CCR only at the
19 Mitchell plant, not for CPLG investments at that plant.
20 And do you recall, and please correct me if I'm wrong,
21 that when the joint capacities of Appalachian Power and
22 Wheeling Power were considered together, there was a
23 \$27,000,000 annual net benefit to customers that was
24 required under that first scenario?

25 A. I believe this was in the testimony of Mr.

1 Martin. And he looked at if Wheeling Power was able to
2 --- from Appalachian Power instead of requiring
3 additional capacity, that the cost savings would be
4 somewhere in that neighborhood. But I think the
5 Commission amended that number in the Order to show it's
6 a little over \$27,000,000. That was I think what was in
7 the testimony.

8 Q. Okay. And let me ask directionally. I'm not
9 asking for a number. Do you think that benefit would go
10 up or down, considering increased costs by West
11 Virginians for ELG costs at Mitchell?

12 A. Well, I think at that time I was looking at
13 what is the total capacity you use for certain entities,
14 you know, potentially --- additional energy is created
15 by --- when you work with all the plants. There can be
16 no one that has that capacity, making that value
17 different than looking at the --- someone's not
18 anticipating either additional energy sales or capacity
19 sales ---.

20 Q. Let me ask this, and we can go back in the
21 record, but I believe I asked this of Ms. Trecuzzi. Is
22 it true that neither Appalachian Power or Wheeling Power
23 participate in capacity functions?

24 A. I think we do.

25 Q. You do?

1 A. Yes. It's my understanding that there is
2 another cost to AEP, each service costs AEP its
3 operating companies of how much capacity they can
4 monetize in the market. And after an operating company
5 has met its needs and has an additional reserve margin
6 pending, then monetize. And I know that those companies
7 had monetize that additional capacity in the past.

8 Q. And I want to ask a little bit about the energy
9 value as well. I don't want to get into the capacity
10 factors, but again, I think that Mr. Martin, in the
11 original, proceeding testified that essentially any
12 scenario would require heavy reliance on the market for
13 energy purposes. Do you recall that?

14 A. I can't recall those exact words. I know he
15 had a declining capacity at utilization plants.

16 Q. And would that declining capacity factor
17 represents the decline utilization of these plants? In
18 other words, they might run less and less going into the
19 future?

20 A. That would be more what we call decline ---.

21 Q. In fact, they would expect to provide less and
22 less in the future, declining capacity factor?

23 A. I think the model that was created that lists
24 all the possibilities of how the market forms. So a
25 change in something market could push the other

1 direction. I think when he was looking at that time at
2 the analysis, it was running less in the future.

3 Q. Okay. And if they're running less, there's
4 going to be less and less energy going to those plants;
5 correct?

6 A. That's what creates energy values running ---.

7 Q. In the same way, because there's limited energy
8 values in these plants, they're running less and less,
9 that means cheaper energy is available elsewhere to
10 customers?

11 A. The Companies try to maximize or minimize their
12 costs. And they run their plants when they are
13 economically in the money. And if there's a cheaper
14 option, they purchase that power for their customers.

15 Q. And a declining capacity factor would mean that
16 that cost in the future is going to more and more
17 represent a prudent decision to be made when they're
18 purchasing from another source rather than running their
19 own plants. Isn't that fair?

20 A. If the utilization declines, it's because the
21 Company has seen a better option.

22 Q. So cheaper energy produced from somewhere else?

23 A. If it's cheaper in the future, that --- that
24 would be --- that would be the prudent thing to do.

25 Q. And that is what is predicted based on the

1 declining capacity factor?

2 A. We're looking at, you know --- years --- and
3 your --- they change over short-term and long-term. At
4 the time of the analysis was performed and the
5 testimony, that is what is stated.

6 ATTORNEY BECHER:

7 Thank you. Nothing further.

8 A. Thank you.

9 CHAIR:

10 West Virginia Coal Association?

11 ATTORNEY JACOB ALTMAYER:

12 Thank you, Madam Chairman. Just a few
13 questions. Can you guys hear me clearly?

14 CHAIR:

15 Yes.

16 ATTORNEY JACOB ALTMAYER:

17 Okay.

18 CROSS EXAMINATION

19 BY ATTORNEY JACOB ALTMAYER:

20 Q. Thank you, Mr. Short. The line of questioning
21 from the previous two Counsel there got into a
22 discussion regarding the original filing and the
23 modeling done by the Companies in that filing, and you
24 didn't do the modeling. You're not familiar with that
25 process?

1 A. That is correct. I did not do the modeling,
2 but I have some general knowledge of it.

3 Q. Are you aware that in that modeling process,
4 the Companies determined that the best option, if the
5 capacity needs to be replaced from these plants, would
6 be gas-fired turbines?

7 A. I think that can be said for that level
8 capacity. Thinking of the short fall, the cheapest
9 option, yes, gas-fired turbines.

10 Q. Are you aware of what price per million Btu
11 they are using approximately in their fundamental
12 forecast?

13 A. I am not.

14 Q. Does it sound accurate to be around \$2.50 per
15 million Btu?

16 A. I can not --- would not be able to answer. I'm
17 sorry.

18 Q. How about conceptually? If the forecast did
19 use 2.50 per million Btu and that price rose over \$5 per
20 million Btu, would that --- what effect would that have
21 on the option of gas-fired turbines to replace capacity?

22 A. Well, that would make the cost of producing
23 energy from that generation more expensive. I think the
24 plant is meet --- used as a capacity and perform very
25 little. So it would have a higher impact on the actual

1 energy produced.

2 I do not think they were looking at it as an
3 energy producer, but more as a capacity --- meet
4 capacity. So it would not have a cost impact on any of
5 the capacity. It would just have a cost impact on the
6 amount it actually runs for energy needs.

7 Q. Are you aware that the price per million Btu in
8 the energy hub market has steadily increased since our
9 previous evidentiary hearing?

10 A. Yes.

11 Q. Are you aware of what price it is now?

12 A. I believe I saw the maximum price --- the range
13 for Btu.

14 Q. And given that increase in price, if we
15 revisited the modeling and the net present values of
16 each of these plants, would that increase the value of
17 the plants as constituted now in that analysis?

18 A. It does very well change, that increased the
19 value. Unfortunately, there were multiple variables in
20 those models and they're not all, you know, going to
21 stay the same place.

22 Q. Understood. Thank you. Now, one of the, I
23 believe it was Sierra Club's Counsel --- said the burden
24 on this Commission to make a decision that is reasonable
25 and prudent for the West Virginia ratepayers. And they

1 asked you your opinion if providing capacity to --- or
2 benefits to Virginia and Kentucky customers would be
3 reasonable and prudent. Do you remember that line of
4 questioning?

5 A. Yes. You worded it slightly different, but I
6 think that generally was the question.

7 Q. Is it possible for it to be reasonable and
8 prudent for this Commission to approve the ELG recovery
9 from West Virginia ratepayers if the operation of these
10 --- continued operations of these plants is the cheapest
11 option for delivering power to West Virginia ratepayers?

12 A. Yes, I believe that it is.

13 Q. And whether it's fair to West Virginia that
14 some benefit is going to Virginia ratepayers or Kentucky
15 ratepayers is irrelevant to whether it's a reasonable
16 and prudent decision for West Virginia ratepayers?

17 A. This Commission determines that it's reasonable
18 and prudent, the best cost option benefits for the
19 return.

20 ATTORNEY JACOB ALTMAYER:

21 Understood. Thank you very much. No
22 more questions, Madam Chairman.

23 CHAIR:

24 Thank you. Consumer Advocate?

25 ATTORNEY WILLIAMS:

1 May I approach the witness, please?

2 CHAIR:

3 Yes.

4 ATTORNEY WILLIAMS:

5 I have another exhibit. I distributed
6 to the witness and Commission actually portions of
7 exhibits that are already in the record. These were
8 exhibits that were sponsored earlier by Brian D.
9 Sherrick, Appalachian Power Company, showing their
10 estimated costs of the improvements at both the
11 Mitchell, Amos and the Mountaineer plants. So these are
12 not new numbers, new evidence, but I thought I would
13 distribute them so they could be referenced easier.

14 CHAIR:

15 And how do you want them marked, Mr.
16 Williams?

17 ATTORNEY WILLIAMS:

18 Collectively. Let's mark them as CAD
19 Cross Examination Exhibit 3.

20 (CAD's Cross Examination Exhibit 3 was
21 marked for identification.)

22 CHAIR:

23 Okay. They may be so marked.

24 CROSS EXAMINATION

25 BY ATTORNEY WILLIAMS:

1 Q. This is a preliminary question. Mr. Short, I
2 know it was in your bio earlier, but how many years have
3 you worked as a regulator at the Public Service
4 Commission?

5 A. More than 30 years.

6 Q. And as a general matter, are you familiar with
7 how the burden of proof works in cases in front of the
8 Commission?

9 A. Generally, yes.

10 Q. And which party bears the burden of proving all
11 elements of the case that's before the Commission in
12 this case?

13 ATTORNEY FISHER:

14 I would object to this line of
15 questioning. They're asking for a legal opinion.

16 ATTORNEY WILLIAMS:

17 He's a regulator. It's gone beyond
18 legal. Everybody knows that the burden of proof is on
19 Companies.

20 CHAIR:

21 Well, then it's said and let's move on.

22 ATTORNEY WILLIAMS:

23 Thank you.

24 BY ATTORNEY WILLIAMS:

25 Q. Now, when the Virginia Commission looked at the

1 application that was filed, they didn't preclude the
2 Company from receiving any kind of rate relief in the
3 future for covering these costs?

4 A. The Virginia Commission deemed it was prudent
5 to do the CCR work and with --- the Companies had an
6 option of returning with additional information and
7 making an argument for covering the cost.

8 Q. And that is because the Commission determined
9 that the Companies did not carry the burden of proof
10 before the Virginia Commission to show that the ELG
11 costs were reasonable and appropriate and prudent, at
12 this time. Is that correct?

13 A. I think that's a summary of how it went over,
14 yes.

15 Q. And the Virginia Commission and the West
16 Virginia Commission are both talking about two
17 particular plants in particular in this case, aren't
18 they?

19 A. That's correct. The Amos plant and the
20 Mountaineer plant are in Appalachian Power ---.

21 Q. Now, in the original application, the part I
22 showed to you, on the costs, how were the --- when you
23 made the application for the Commission, how were the
24 expenses going to be shared between West Virginia and
25 Virginia in your original application before the

1 Commission, the PSC, for operating Amos and doing the
2 operation of Amos and doing the operation of
3 Mountaineer? A. We would use the generation allocation
4 factor.

5 Q. And that would have had 41 percent for the
6 expenses borne by West Virginia and almost 60 percent
7 borne by Virginia; is that correct?

8 A. I think it's --- I think you're correct on the
9 41 percent for West Virginia. I think there's also a
10 couple other small entities that will receive a portion
11 of the cost, not just Virginia, but wholesale
12 customers will receive a portion. The entire --- the
13 rest is between the regulated customers. There's
14 another portion of the cost. The 41 percent share for
15 West Virginia is correct.

16 Q. Okay. And what we distributed earlier, what
17 was originally estimated to be the overall possibility
18 of the CCR and ELG upgrades?

19 A. I think originally the CCR and ELG is
20 \$177,000,000, I believe.

21 Q. And how much of it was just CCR only?

22 A. It's hard to say CCR only. It's not in this.

23 Q. I think you have an exhibit that says that.

24 A. Yes, we have the exhibit. There are
25 assumptions made on how you allocate the costs with

1 their project, because it's not so clear, you know, this
2 length of pipe does this part of the project and the
3 next two ---. So there were assumptions made about how
4 the costs would be allocated and they would be used for
5 the application of those costs.

6 Q. Okay. So as I understand, the exhibits are
7 originally authored by the Company at hearing on June
8 8th and June 9th of this year. The Company said that
9 the total CCR, ELG cost for upgrading payments would be
10 \$177,130,000, estimated. The CCR-only option was
11 \$77,719,000, estimated, leaving a difference of \$994 ---
12 I'm sorry, \$99,411,000 for ELG upgrade costs only.
13 That's the way it was presented to us on June 8th and
14 June 9th.

15 A. That is correct.

16 Q. So 41 percent of that \$99,000 (sic) you're
17 going to ask West Virginia ratepayers to pay are how
18 much of those upgrade costs?

19 CHAIR:

20 You didn't mean \$99,000.

21 ATTORNEY WILLIAMS:

22 I'm sorry. \$99,000,000.

23 A. Yes.

24 BY ATTORNEY WILLIAMS:

25 Q. \$99,000. You add the three zeroes. I got it

1 wrong, so ---. So everything on those exhibits actually
2 has three extra zeroes added to it, does it not?

3 A. Unfortunately, yes.

4 Q. So 41 percent of the \$99,000,000 was asking for
5 roughly how much West Virginia ratepayers to cover that?

6 A. It's very close to 41,000,000. I mean, if it
7 was \$100,000,000 ---.

8 Q. And now that you're coming into this new
9 option, you've also said not only is this \$177,000,000
10 estimate for doing both, you've actually increased the
11 cost of upgrading payments in your testimony, did you
12 not?

13 A. That's correct. We think there's new, more
14 accurate cost estimates for the total cost of the CCR
15 and ELG work in total.

16 Q. Another \$40,000,000?

17 A. Yes, in West Virginia it's \$217,000,000.

18 Q. And have the parties have an opportunity to
19 look at the breakdown of how those increased expenses
20 are shared?

21 A. I was checking an approximation of what the
22 cost responsibility would be --- so I'm not sure.
23 There's not a breakdown of the costs at certain levels,
24 but there's a breakdown of the costs when you're working
25 with the total revenue requirement for West Virginia

1 customers.

2 Q. Okay. But in essence, you're --- by your new
3 application, are you essentially asking us to say that
4 instead of West Virginia ratepayers bearing the cost of
5 doing \$41,000,000 worth of upgrades, we're now supposed
6 to bear \$140,000,000, just for Amos?

7 A. It's not a new application, but --- it's a
8 Petition to Reopen the case. We've presented new cost
9 information and they're requesting customers pick up
10 their share or pick up the entire share of the ELG
11 work ---.

12 Q. It would be their share, Virginia's share, and
13 these other unidentified party's shares as well?

14 A. In my opinion, those other parties will not
15 have the same level of capacity after 2028, so that work
16 is not necessary. The West Virginia Commission has
17 previously said they think it is a prudent decision to
18 do the ELG work to the plant. We're asking --- it's up
19 to the Commission --- the West Virginia Commission to
20 affirm that decision.

21 Q. Now, Appalachian Power Company has filed an
22 application to amend the permit, NPDES permit, before
23 the DEP now. It has been approved, has it not?

24 A. I'm sorry, I'm not really the best witness to
25 speak on that.

1 Q. Did you --- were you sitting in the testimony
2 for the earlier witness?

3 A. I was.

4 Q. Did he say that he had the final permit
5 approved?

6 ATTORNEY FISHER:

7 I would object. That's already been
8 covered by Mr. Spitznogle, and Mr. Short has said he's
9 not the expert on those issues.

10 BY ATTORNEY WILLIAMS:

11 Q. If you can answer this question. Has it been
12 approved?

13 A. I'll be honest. I did not actually hear him.
14 Because it's not on the introduction sheets. And I
15 appreciate you have a hard time following it, it's
16 complicated. I'm just concentrating on my own testimony
17 right now.

18 Q. Doesn't the permit include both CCR and ELG
19 upgrades that will be needed to meet those upgraded
20 standards?

21 A. I'm not sure of the question.

22 Q. Well, does the NPDES permit that's currently
23 recently submitted and received final approval from the
24 DEP ---

25 A. Correct.

1 Q. --- earlier testimony include all CCR and ELG
2 upgrades that are contemplated by your \$217.3 million
3 dollar upgrade?

4 A. I cannot speak to what's in the permit --- the
5 cost estimate of doing the CCR and ELG work at the Amos
6 plant.

7 Q. Did you recall the earlier testimony in this
8 case, that Amos would be fully compliant with all ELG
9 standards by December of '22, if that upgrade is
10 completed for the permit?

11 CHAIR:

12 Mr. Williams, if this was covered by
13 the earlier testimony, there's no reason to go over it
14 again, and the transcript will speak for itself.

15 BY ATTORNEY WILLIAMS:

16 Q. Let me ask the question this way. Once the
17 plant has been upgraded with the new NPDES permit
18 operating, will the plant continue to serve all
19 customers, both in Virginia and West Virginia?

20 A. Yes.

21 Q. And whatever upgrades are completed pursuant to
22 that NPDES permit would have been incurred by the
23 Company as operating expenses and project expenses?

24 A. The parties will pay for them, yes.

25 Q. And that will be done well in advance of 2028,

1 will it not?

2 A. That is correct. And part of this falls within
3 costs associated for keeping the plant open beyond 2028,
4 which the last Commission previously said was a prudent
5 decision, right.

6 Q. And also meet its current obligations under its
7 existing permit that will then be approved?

8 A. I'm sorry, repeat the question.

9 Q. Ask the question this way instead of --- I'll
10 reword it. Will now all customers that are receiving
11 service through that Appalachian Power Company plant,
12 after it has received an upgrade pursuant to the NPDES
13 permit, be benefitting from the plant?

14 A. They will benefit. They would benefit through
15 2028 when the CCR work is done. After 2028, we believe
16 the West Virginia customers will benefit. And with
17 respect to Virginia customers, if they rely on that
18 capacity, we will pay for it, whatever option they find
19 is most prudent for their customers. But until that
20 time, there's no --- you know, that is the date that you
21 have to have the --- to have a plant operating past
22 2028, you have to do ELG work. You have to do it before
23 then. So I would say someone's received a benefit of
24 that. The benefit comes when it's operating past 2028.

25

1 Q. They're also receiving the benefit from the
2 fully-upgraded plant in 2025 as well, aren't they?

3 A. The improvements will have been made. The
4 improvements will be made to keep the plant operating
5 past 2028. It's more cost-effective and that's the
6 requirement to make the progress on the schedule we
7 submitted so the work can be completed before then. But
8 the benefit will come when the plant stays operational
9 past 2028.

10 Q. I think we're missing points on each other.

11 A. I apologize.

12 Q. Once the expenses have been made and the
13 upgrades have been made, will every customer receiving
14 electricity service through the upgraded Amos plant be
15 responsible to share in cost of operation of that plant?

16 A. I think the customers will pay the costs of
17 what was necessary to keep the plant operating to 2028.

18 And the West Virginia customers will pay the costs of
19 keeping the plant operating past 2028. If you and I
20 drive a car together and you're going to stop riding
21 with me in 2028, but I send my insurance premium in
22 today, because my insurance is past 2028, you're not
23 getting any benefit of that even if I paid it before
24 2028.

25 Q. But you are receiving the service, once the

1 expenses have been incurred. The expenses are being
2 incurred in March of 2022, 2023 while the improvements
3 are being made; correct?

4 A. The improvements will be made and will be paid
5 for before 2028. The benefit of those improvements will
6 start ---.

7 Q. I'm not asking about 2028 at this point. I'm
8 talking about in 2023 and 2024, when you're providing
9 service, those costs that have been done to upgrade the
10 plant will have been done?

11 A. That's correct.

12 Q. And that would be pursuant to the NPDES permit
13 that is pending and has actually been approved already,
14 unless you change course?

15 A. I'm not the expert on it, but I know that CCR
16 work will allow the plant to operate through 2028, the
17 ELG work will allow the plant to operate beyond 2028.
18 Those projects will be completed before then and they
19 will be paid for before then, but the benefit of the ELG
20 work will start after 2028.

21 Q. But for cost-recovery purposes in a rate case,
22 the rate expenses would be incurred well before 2028 and
23 you'd be looking for cost recovery from the various
24 jurisdictions. You can seek the cost recovery from West
25 Virginia. You can seek the cost recovery from Virginia.

1 And how those different jurisdictions rule together is a
2 matter of how they process their own rate cases; is that
3 not correct?

4 A. That is correct. I think at this time the
5 Virginia Commission has processed that information and
6 they have not approved the ELG, but it's possible before
7 then they will decide that this is the best prudent
8 option for their customers and will pay a good portion
9 of it.

10 Q. Okay. In certificate cases --- let's go away
11 from the certificate case. You've been at the
12 Commission for 30 years. Would you agree that most
13 certificate cases, the cost of supporting the upgraded
14 facilities are not covered by rates until they are in
15 place and useful?

16 A. I think that is the majority of time. I know
17 in this case when we applied, we stated the reasons. We
18 cited other cases which the Commission had granted
19 relief through rates, so work could be completed without
20 a burden on the company.

21 Q. So you sought special rate-making treatment of
22 this particular certificate? From the PSC and also from
23 Virginia. And the PSC has allowed that type of
24 different treatment. But Virginia has denied at this
25 point, but is left the opportunity to file a rate case

1 to seek recovery of those same expenses at some point in
2 the future; isn't that correct?

3 A. That is correct.

4 Q. So if that is the point, if you're asking the
5 Commission to prejudge and predetermine and say that
6 they're going to pay a hundred percent of the expenses
7 for the upgrades, including whatever expenses would
8 normally be allocated to Virginia, why in the world
9 would Virginia want to double cover those same rates?

10 ATTORNEY FISHER:

11 Objection. Calls for speculation.

12 ATTORNEY WILLIAMS:

13 Yes, it does. This is the whole
14 application. We don't know what we're dealing with ---.

15 ATTORNEY FISHER:

16 He's asking for him to opine what the
17 Virginia Commission is going to do.

18 ATTORNEY WILLIAMS:

19 Agreed.

20 BY ATTORNEY WILLIAMS:

21 Q. We do not know what Virginia's going to do in
22 the future with your application, do we? It's all
23 speculation.

24 CHAIR:

25 I'll sustain the objection.

1 BY ATTORNEY WILLIAMS:

2 Q. Let's turn to the Mountaineer plant. In those
3 cases, would you agree that just three months ago the
4 Company represented to the Commission that the estimated
5 cost of doing the CCR, ELG projects was \$72,885,000
6 combined, and the CCR-only option was estimated to be
7 \$52,144,000; is that correct?

8 A. That is correct.

9 Q. Leaving a difference of about \$20,441,000 in
10 ELG costs. So based on that, is there a reasonable
11 assumption that Virginia has agreed to pay \$52,144,000
12 of at least its 60 percent share on the CCR project?

13 A. That's my understanding. They've agreed to pay
14 their share of the CCR cost, as presented. However,
15 that does not mean that's the only thing they will pay.

16 As the costs are known and they're updated in the ---.

17 Q. So if the ELG comes back in --- this
18 \$20,000,000 that they haven't allowed now. They may or
19 may not pay their 60 percent share of the ELG?

20 A. Currently they have said they are not going to
21 pay their share of the ELG.

22 Q. They just said you haven't met your burden yet.

23 A. I'm sorry?

24 Q. They just said you haven't met your burden.

25 ATTORNEY FISHER:

1 Objection. Asked and answered.

2 BY ATTORNEY WILLIAMS:

3 Q. And you also in your application indicated that
4 the Mountaineer expenses had increased by \$10,000,000
5 since June.

6 A. That's not even the current estimate. My
7 testimony is about \$82,000,000 in total for CCR and ELG.

8 Q. That's \$10,000,000 higher?

9 A. That's correct.

10 Q. And have you differentiated that between ELG or
11 CCR? Do you know what part of that goes to CCR and what
12 part goes to ELG?

13 A. We had some estimates and I think I explained
14 some of the difficulties with it. If someone had taken
15 a CCR-only option and we had fleshed that out, it may
16 have been more expensive than the difference between the
17 ELG and the total cost now. And I think the
18 determination will have to be was the prudent cost to be
19 allocated to somebody with only a CCR option, because
20 there were cost benefits to doing CCR and ELG at the
21 same time. So the total number to do CCR alone and the
22 ELG alone could be higher in how that determination can
23 be made. But you know, it's --- a lot of work to it.

24 Q. But originally when we were talking in June
25 about 41 percent of this \$20,441,000 difference would

1 have been around \$8,000,000 for West Virginia's share of
2 those upgrades?

3 A. That's correct.

4 Q. And now we're talking about West Virginia
5 bearing \$30,000,000, a hundred percent on its own?

6 A. That would be the difference between the CCR
7 costs, as previously reported, and the \$2,000,000 total.
8 But once again, now that Virginia has said only CCR,
9 there will have to be a determination made of what's the
10 appropriate amount of CCR expense to be recovered from
11 Virginia, if that's the option, the only option they
12 pick up.

13 Q. But again, Virginia may or may not include
14 those expenses as recoverable at some point in the
15 future?

16 A. That is a possibility.

17 Q. Let's turn to Mitchell. Mitchell is different
18 because we're talking about Kentucky at that point,
19 correct; Kentucky and West Virginia's expenses?

20 A. That's correct --- ELG plants, which are West
21 Virginia and Virginia.

22 Q. In that case, at least in June, the Company
23 represented as being \$133,519,000 to do both the CCR and
24 ELG when the CCR-only option is \$35,000,000, leaving
25 approximately \$98,420,000 as a difference between those

1 two numbers. So I assume by that, the Company was
2 saying that the ELG expenses that were at stake were
3 \$98,000,000?

4 A. In an attempt to --- that's the total cost,
5 that's how it was estimated at that time.

6 Q. So West Virginia would have been on the hook
7 for a little bit under \$50,000,000? By the same --- we
8 were going to improve both the CCR and ELG upgrades and
9 we'll bear our fair share of the costs. That would've
10 been roughly a little under \$50,000,000; correct?

11 A. I think at that time our share of the cost was
12 \$67,000,000. It's an estimate \$135,000,000 total.

13 Q. I believe the record will reflect what it does
14 reflect, but you didn't change these numbers until your
15 recent filing. The \$98,000,000 is what you represented
16 in June, did you not, at that hearing?

17 A. I was at that hearing ---.

18 Q. Take \$133,519,000, subtract \$35,000,039, come
19 up with \$98,420.

20 A. Okay.

21 Q. And divide that by two. That comes to
22 \$49,000,000. That would have been the West Virginia
23 share of upgrading Mitchell plants?

24 A. That would have been the West Virginia share of
25 the ELG upgrades for that plant. I mean, that's the

1 difference you subtracted out when you took 50 percent
2 of the difference ---.

3 Q. And you took the increased cost, after you
4 upgraded your expenses. You did that in September, so
5 basically three months after you presented testimony on
6 the cost, you said it was a million dollars higher at
7 Mitchell. Some of that's going to be for ELG. Some of
8 that's going to be for CCR. But we're now looking at
9 West Virginia ratepayers bearing \$113,000,000 of
10 expenses to upgrade Mitchell versus \$49,000,000.

11 A. Is there a question in there?

12 Q. Is that an accurate number? Is that what ---
13 is that what your current exhibit is asking us to cover
14 in West Virginia?

15 CHAIR:

16 Mr. Williams, would you repeat those
17 numbers? Those are not the numbers that I have before
18 me.

19 ATTORNEY WILLIAMS:

20 Okay. What I'm looking at is the
21 exhibits that were offered by Brian D. Sherrick. I'm
22 looking at the Mitchell CCR and ELG project cost
23 estimates. If you look at the exhibit previously
24 identified as Company Exhibit BS-D page one of one, the
25 total allocation for both CCR and ELG is \$133,519. As

1 we said earlier, you add three zeroes to that, so that
2 would be \$133,000,000.

3 If you turn to the --- I'm looking for
4 the --- I'm sorry. Mitchell only is on the back page.
5 I apologize. We have Company Exhibit BDS-D7, page three
6 of three, showing the CCR-only estimate was \$35,090.
7 What I'm doing is I'm subtracting the \$133,000,000 ---
8 I'm subtracting the \$35,000,000 from the \$133,000,000 we
9 had earlier. That was what they represented in June.
10 By their current application, they have said --- and
11 this is in Randall Short's testimony --- that they're
12 \$15,000,000 higher from what they represented back then.
13 That's where I'm getting the extra \$15,000,000.

14 CHAIR:

15 For a total number of what?

16 ATTORNEY WILLIAMS:

17 \$113,000,000 for covering the
18 difference between what we said West Virginia was going
19 to be covered in June versus what they're asking us to
20 cover now.

21 CHAIR:

22 So what is the total number now for
23 Mitchell?

24 ATTORNEY WILLIAMS:

25 Mitchell, the total number that he

1 provided to us was the \$133,000,000. They have now
2 represented \$148.3 million.

3 CHAIR:

4 Okay. I just wanted to make sure we
5 had the same numbers. Proceed.

6 BY ATTORNEY WILLIAMS:

7 Q. So of that 148.3 million of the upgrades, we're
8 asking West Virginia ratepayers to bear \$113,000,000 of
9 those upgrade expenses, total, for Mitchell ---.

10 A. Yes. So just a couple things. Yes, the
11 hearing was in June. The cost estimates we had were
12 created in the fourth quarter or earlier of 2020. So
13 that's when we had filings in December. That's the cost
14 estimate at that time.

15 The total was \$133.5 million for CCR and ELG.
16 The West Virginia share, 50 percent of that, it's going
17 to be about 67.5 million. The total cost now is going
18 to 133 to 148. I think your assumption about we pick up
19 all the ELG and half of the CCR, which is ---. That's
20 in the ballpark of what the cost would be.

21 Q. So Kentucky's agreed to pick up half of the CCR
22 only, which is \$35,000,000?

23 A. It's a little bit higher than \$33,000,000 now.
24 And again, it's a determination of what will be the
25 appropriate costs through CCR only. CCR only by itself

1 would cost more than CCR and ELG combined. So it's
2 possible that, you know, a higher cost will be allocated
3 to them, because it's a more expensive option to do the
4 CCR only than to do CCR and ELG at the same time.

5 Q. Okay. I'm a little confused, because the
6 exhibits we just referred to said CCR only for Mitchell
7 was \$35,000,000. You're saying it wasn't?

8 A. I'm saying that was looked at as the --- if you
9 took the total cost and you tried to allocate your costs
10 for CCR, but that was not just the cost of doing CCR
11 project, stopping and walking away. In total costs that
12 was looked at was \$130,000,000 to \$135,000,000 and it
13 was determined ---. Because there were, like I said,
14 common costs, common shared costs of doing the work, and
15 so it's an approximation of how much is that CCR work
16 and how much is ELG work. But if you come in and said,
17 we're only going to do CCR work, the cost would have
18 been higher, I believe, than \$35,000,000 to do that.

19 Q. So how much is Kentucky willing to bear of this
20 \$148.3 million that you now are presenting as a revised
21 estimate?

22 A. I assume that --- approval for the cost
23 recovery and if they incur more cost recovery, in order
24 to allocate it, they would have to review those, to see
25 that those additional costs are recovered. At that time

1 also, no one said it's only going to be this number of
2 dollars.

3 Q. But again, with both of these cases, you have
4 pending NPDES permits that are including expenses to do
5 both CCR and ELG upgrades. And so if that's done and
6 granted, the CCR and ELG upgrades will be done well
7 before 2028. It will be done in 2024, I think, or 2023,
8 by your project estimates on schedule; isn't that
9 correct?

10 A. That's correct.

11 Q. And Kentucky will continue to be served by the
12 Mitchell plant between 2023 and 2028?

13 A. Yes, it will.

14 Q. But you're saying that West Virginians still
15 bear all the expenses of the upgrade between 2023 and
16 2028?

17 A. No. I'm saying that West Virginia will bear,
18 if this Commission approves it, their share of the ELG -
19 -- I'm sorry, the ELG work and their share of the CCR
20 work. Kentucky will bear their share of the CCR work,
21 what they approve.

22 Q. And in the few days we've had to review your
23 request application, have the parties had a chance to
24 review those expenses to figure out how they should be
25 spread out?

1 A. We're not seeing any change in rates at this
2 time and we will submit our next annual application ---
3 ECS tracker, update cost information, actual expenses
4 and estimates what the expenses will be for the next
5 rate year and they will have a chance to review at that
6 time.

7 Q. Okay.

8 Your overall expenses increased by \$65,000,000
9 from June of this year to September of this year, based
10 on testimony that's been offered.

11 A. I think the increase from the estimates that
12 were put together in 2020. The hearing was in June of
13 this year. We've updated the information as we move
14 away from engineer's estimates to more actual estimates,
15 and bid processes and developed materials ---. Yes,
16 there has been an increase, but you keep saying that
17 there's been an increase since June. When you're saying
18 June, that's not exactly accurate.

19 Q. Could you have presented these upgrades in
20 June?

21 A. We presented updated numbers. Yes, more
22 information as you move closer to actually doing the
23 work, to getting new projects out, you will revise
24 numbers, that's a possibility. Unfortunately, it's been
25 a cost increase year. Something that happens with that

1 cost increase also, cost of materials, cost of other
2 things increase the cost of projects. And we present
3 that information to the Commission.

4 Q. And this, too, is just an estimate. So it also
5 is subject to revision, is it not ---?

6 A. Yes. I hope we're getting closer to an
7 accurate number, but it is still an estimate at this
8 time.

9 Q. But whatever they happen to be, you're wanting
10 a firm commitment from the Commission that the West
11 Virginia ratepayers will pay a hundred percent of the
12 costs?

13 A. We're looking for a firm commitment that the
14 West Virginia Commission deems these costs prudent, they
15 will allow cost recovery of them.

16 Q. If we waited to make the rate determinations
17 after the project was finished, in place, used and
18 useful, would there be certainty levels ---?

19 A. Sure. Once you spend the money, you have a
20 much better idea of how much is going to be spent. But
21 that was not an option for a budget this far. So we
22 felt that the cost was great and we sought to have a
23 cost recovery while we put the project in place and
24 spending this money for the benefit of customers.

25 Q. All right. Let me see if I understand some of

1 your earlier testimony. Maybe I'll try to add to it
2 simply --- or ask it simply and see if you can give a
3 simple answer. If the Commission is silent about rate
4 recovery, ---?

5 CHAIR:

6 Mr. Williams?

7 ATTORNEY WILLIAMS:

8 Commissioner?

9 CHAIR:

10 Mr. Williams, I don't want to cut you
11 short, but I think I get the idea of what points you're
12 trying to make. But we've got a few more witnesses. So
13 would it be inappropriate if I ask you to maybe speed
14 things up a little bit?

15 ATTORNEY WILLIAMS:

16 I think I can do this in about three
17 questions, if I could get a straight answer.

18 CHAIR:

19 Okay. Thank you.

20 BY ATTORNEY WILLIAMS:

21 Q. If October 13, 2021 passes and the Commission
22 is supportive of the upgrades being done, but it's not
23 clear exactly how you're going to be recovering those
24 expenses from West Virginia and West Virginia
25 ratepayers, is the Company going to close Amos?

1 A. I cannot make that determination.

2 Q. Are they threatening to close Amos if they
3 don't get the order in?

4 A. I know the Company is looking for guidance and
5 information to help them make the best decision from
6 this Commission, and looking at other jurisdictions.

7 Q. If the --- would you agree that one option that
8 the Company could do on October 13th would be to
9 continue the course that they're on, proceed to upgrade
10 the plant, and seek recovery of reasonable and prudent
11 fair costs and expenses through normal rate-making
12 processes?

13 A. That would be an option, but I can't tell you
14 that's the option the Company would exercise.

15 Q. And at that point it would be based on known
16 and measureable expenses, would it not?

17 A. If you waited until the project is completed,
18 that would be known and measurable costs at that time.

19 Q. And if the Company does nothing more than
20 continue the course that it started, does it have to do
21 anything at all on October 13th?

22 A. And again, I'm not an expert on this, so I'm
23 attempting to paraphrase my knowledge from what I've
24 heard. If the Company does nothing by October 13th,
25 then they are at risk, if they change their mind in the

1 future, possibly have to close plants earlier if they
2 continue down that path.

3 Q. But they will upgrade to meet all current
4 standards, would they not, if they stay on the current
5 path?

6 A. If they stay on the current path and spend the
7 money to do those options, that's where they will go,
8 but I would not say that they will exercise that option.
9 Additional information from this Commission would be
10 considered.

11 Q. But they would be at no risk of premature
12 closure if they proceed on the path they're on; is that
13 correct?

14 A. If they were --- yes, if they continue.

15 Q. Because then they would meet those standards.
16 They wouldn't have to close in 2028 unless it's
17 uneconomical. And they wouldn't have to close after
18 that unless it was uneconomical --- isn't that correct?

19 A. If they continue down that path with all the
20 information it's important to have.

21 Q. And the economics of that plan, of course, is
22 subject to a lot of different changes in the markets,
23 favorable or unfavorable, at different points in the
24 future. Would the Company still decide to close the
25 plants even after doing the upgrades, if it becomes

1 uneconomical to continue to operate the plants?

2 A. I think the Companies will continue to make
3 further reviews of the best options for customers if we
4 have the ability and the option to keep the plants
5 running past 2028.

6 Q. If you perform the NPDES permits as filed,
7 there's no question the Companies can proceed beyond
8 2028, if it wants to?

9 A. My knowledge, if they continue to meet the
10 rules --- proceed with some of the ELG work, that would
11 allow the Companies to operate the plants past 2028.
12 But I'm in no position to determine if the Companies
13 will do that without additional information, including
14 the things they requested in this Petition to Reopen.

15 ATTORNEY WILLIAMS:

16 No further questions.

17 CHAIR:

18 Thank you. Okay. CAG?

19 ATTORNEY MURTHY:

20 Hi. Raghu Murthy, can you hear me
21 okay?

22 CHAIR:

23 No.

24 ATTORNEY MURTHY:

25 Is this better? How about now?

1 CHAIR:

2 No.

3 ATTORNEY MURTHY:

4 Okay. I'm going to call ---.

5 PAUSE IN RECORD

6 ATTORNEY MURTHY:

7 Can you hear me?

8 COMMISSIONER RANEY:

9 Yes.

10 ATTORNEY MURTHY:

11 Hello? Hi. Can everyone hear okay

12 now?

13 OFF RECORD DISCUSSION

14 ATTORNEY MURTHY:

15 Hi. Good afternoon, Your Honor. Can

16 everyone hear me now?

17 CHAIR:

18 Yes.

19 ATTORNEY MURTHY:

20 Great. Okay. Thank you. Okay.

21 CROSS EXAMINATION

22 BY ATTORNEY MURTHY:

23 Q. Good afternoon, sir.

24 A. Good afternoon.

25 Q. I wanted to ask you a few questions about the

1 Kentucky Public Service Commission July 15th Order,
2 which you mention on page five. Right?

3 In your conversation with Mr. Naum earlier, he
4 stated that this Order prohibits that ELG work at
5 Mitchell without the Kentucky Commission's prior
6 approval. Is that right?

7 A. Like I said, I am aware of the Kentucky Order.

8 Q. You stated earlier that the Kentucky Commission
9 denied work and prohibited that work at Mitchell without
10 the Commission's approval. Is that right?

11 A. I know I said they denied the work. I don't
12 know if I said they prohibited the work. So I'm just
13 not sure where they're getting that statement from.

14 Q. Okay. Are you aware that in the document, the
15 Kentucky Public Service Commission said that they are
16 prohibiting any work other than the CCR work at Mitchell
17 without the prior approval?

18 A. I do not recall exactly that, in those words.

19 Q. Do you know whether the Kentucky --- the
20 Kentucky Power Company submitted everything to the
21 Commission to get that approval?

22 A. I believe the initial application was a first
23 attempt to do that work.

24 Q. And what is the status of that application?

25 A. The Kentucky Commission has ruled that they've

1 approved the CCR work, not the ELG work.

2 Q. Okay. Okay. Thank you. I wanted to ask you a
3 few questions about the updated cost estimate that you
4 provided in your testimony, starting on page eight. So
5 in your testimony you explain that the estimate sort of
6 for the CCR and ELG project at these plants have
7 increases since the last time they were estimated in
8 December 2020. On page eight, you explain that this
9 Commission had approved environmental compliance
10 surcharges at a certain rate. And you're not seeking to
11 change those rates at this time, but the higher revenue
12 requirements will be reflected in the Companies' over
13 and underrecovery calculations. Do you see that?

14 A. Yes.

15 Q. Okay. So am I right in what you're saying here
16 that the revenue Companies are going to collect through
17 the environmental compliance surcharge is not going to
18 be sufficient to pay the ongoing cost of these projects?
19 Is that right?

20 A. I think in the first year we estimated the
21 cost. At that time we picked up a share of the ELG work
22 and the CCR work. And so to the extent the ELG work is
23 completed in this first rate here is greater than what
24 we had budgeted for, it would be underrecovery.

25 Q. Okay. So you're going --- you're going to come

1 in, the Companies are going to come in later to this
2 Commission with an underrecovery calculation. Is that
3 right?

4 A. Other things could change, but like I said,
5 previously our estimate was based on us picking up a
6 share of the ELG work at plants, and the West Virginia
7 customers pick up all the share. The ELG costs will be
8 higher in this first year. And whether that leads to
9 underrecovery, it's likely, but I'm not sure how much
10 ELG work will be completed in the first rate year
11 either.

12 Q. The ELG project work is going to be more
13 expensive for two reasons. Is that right? One because
14 West Virginia customers have to stay relevant and two,
15 because the costs of the project themselves. Is that
16 right?

17 A. That's correct.

18 Q. And when the Companies come in to provide this
19 underrecovery calculation, that's the time when the
20 Commission will get to see the factors that caused the
21 costs to increase. Is that right?

22 A. That's correct. That's the information --- we
23 will put in justification for, you know, what money was
24 spent the first rate year and how it was allocated, and
25 then going forward, justification for those expenses

1 also.

2 Q. Okay. I'm going to move forward to page 11 of
3 your testimony, where you discuss the Mitchell operating
4 agreement.

5 A. Yes.

6 Q. So the prior Mitchell operating agreement that
7 you're talking about here, that was not offered in this
8 case. Is that right?

9 A. It was not presented as a position --- I can't
10 say that it was presented in the original proceeding. I
11 can't remember.

12 Q. Okay. Mr. Short, would you agree that the
13 initial operating agreement has to be updated before ELG
14 compliance were to start at Mitchell?

15 A. You know, it's a contract between the two
16 Companies and it states how the costs will be allocated
17 with improvements in the plant. I hate to offer a legal
18 opinion on whether or on how that's defined. I mean, it
19 looks like there's a definition of it, but again, that's
20 open to interpretation, I'm sure. But currently it says
21 that, you know, improvements made to the plant are
22 allocated 50 percent to each of the two states.

23 Q. Okay. Let me ask you a different set of
24 questions a different way. Do the Companies intend to
25 try to get the operating agreement amended or updated

1 before ELG compliance work started at Mitchell?

2 A. I think it's something that's going to be
3 addressed in short order. How soon that will be, I
4 don't know. I think, for clarity, it needs to be
5 addressed.

6 Q. If it's something that needs to be addressed,
7 my question is the sequencing of that. My question is
8 whether the Companies intend to update it first and then
9 do the ELG work or start the ELG work and then update it
10 at a later time?

11 A. I do not know the answer to that.

12 Q. Changing the ownership of Mitchell, taking out
13 the --- is that a separate issue from changing the
14 operating agreement?

15 A. Yes, it is. If the ownership changes, there
16 would still need to be an operating agreement between
17 Wheeling Power and the owners of the other share of the
18 plant, if it's another entity.

19 Q. And same question as before. Are the Companies
20 planning to update that --- the ownership of this plant
21 before starting the ELG compliance work in full or are
22 you going to start the ELG compliance work at Mitchell
23 and then later do the ---?

24 A. Nothing more than what I said previously, that
25 the Companies are exploring opportunities and options

1 for, you know, strategic review coming underway,
2 possible ownership of that plant.

3 Q. Earlier you were discussing the ownership
4 transfer options or the ownership transfer. And you
5 mentioned that you were sure that it would involve other
6 regulatory approval as well. Do you remember that?

7 A. Yes.

8 Q. Can you tell us what other approvals you had in
9 mind there?

10 A. I know there was a public statement released
11 that said there needs to be Kentucky Commission
12 approval, and also for Commission approval, there's a
13 change in ownership plan. So those are two examples of
14 the approvals.

15 Q. Okay.

16 Mr. Short, I want to move to a different topic.
17 I want to talk about the allocation of payment to
18 Mountaineer between Virginia and West Virginia. On page
19 three of your testimony, you explain that about 41
20 percent --- to Mountaineer are allocated to West
21 Virginia on a jurisdictional basis.

22 A. Yes. That's the current allocation for
23 generation.

24 Q. Sorry. Sorry for --- the revenue allocation is
25 appreciated; is that right?

1 A. I'm sorry, I missed that part.

2 Q. So 41 percent Mountaineer --- allocated to West
3 Virginia on a jurisdictional basis. The rest is
4 allocated to Virginia. Is that right?

5 ATTORNEY FISHER:

6 Objection. This was already covered in
7 other questions.

8 CHAIR:

9 You may ask that. I'm sure it's just
10 background questions.

11 BY ATTORNEY MURTHY:

12 Q. I will ask again. So 41 percent ---
13 Mountaineer allocated to West Virginia and that means
14 the rest is allocated to Virginia. Is that right, 59
15 percent?

16 A. The rest is allocated, the majority of that
17 goes to Virginia customers. There's a small piece that
18 goes to wholesale customers and Kingsport customers, I
19 believe.

20 Q. Mr. Short, can you explain a little bit more
21 about what that means? Does that mean that West
22 Virginia customers get 41 percent of capacity from these
23 plants and in exchange, they pay 41 percent of the
24 costs?

25 A. I think the 41 percent is a calculation of what

1 the current shared capacity is, but it varies from year
2 to year. It doesn't move a large amount, but you know,
3 every year --- the peak demands placed on the generating
4 capacity of the plant by the customers in that state.
5 And so they had adjustments made for that annually.

6 Q. So in order to have West Virginia pay ---
7 customers pay a hundred percent of the cost of the ELG
8 --- that allocation is going to have to change. Is
9 that right?

10 A. Well, for purposes of those expenses, it would
11 have some factor, other than the previously accepted 41
12 percent, yes.

13 Q. Mr. Short, earlier we talked about the Mitchell
14 operating agreement and how that plays out between West
15 Virginia and Kentucky. Can you tell me what document
16 lays out the allocation between Virginia and West
17 Virginia for --- Mountaineer?

18 A. I didn't quite hear your question. I'm sorry.

19 Q. Sure. My question is, what document or what
20 documents lay out the allocation for Amos and
21 Mountaineer to Virginia and West Virginia?

22 A. I'm not sure exactly how those --- I know there
23 are formulas determined. The costs are allocated and I
24 assume it's set on what your needs are for the plant,
25 calculated, you know, continuously, and then it's

1 trued-up different periods.

2 Q. In order to meet the ELG revenue at the plant
3 and charge the entire amount to West Virginia customers,
4 you need to revise those documents. Is that right?

5 A. I'm not sure that there are documents spelled
6 out, but if this Commission approves it and approves the
7 ELG work, we will see cost recovery from here. We will
8 make another attempt to recover the share in Virginia.
9 And you know, at that point if they say they're going to
10 recover, then it will be a 41 percent share. But at
11 this time, we don't have that information or assurance
12 mechanism. And so there will be a hundred percent cost
13 recovery if this Commission determines that's the path
14 they want to continue to go forward.

15 Q. If it becomes necessary to provide the
16 allocation, when will the Commission and the Virginia
17 Commission be able to review the revisions that are
18 necessary?

19 A. Review the revisions? I'm sorry, I'm not
20 understanding ---.

21 Q. Let me ask a different question. Would this
22 Commission and the Virginia Commission need to approve
23 changes to those allocations?

24 A. I think it would look to see if the allocation
25 is reasonable and what it's based upon. If it calls for

1 coverage on a guarantee from one Commission, that
2 becomes the allocation factor. And it was denied by the
3 Virginia Commission, but this Commission has said that
4 they will approve 100 percent recovery, that's the
5 allocation.

6 Q. One of the question asked before ---. If it
7 comes through that West Virginia customers do have to
8 pay a hundred percent of it, and the allocation needs to
9 change, do the Companies have to change the allocation
10 before they start the ELG compliance work at these
11 plants or afterwards?

12 A. I think for this portion of the expense, the
13 Companies will allocate a hundred percent to West
14 Virginia until such time as we see Virginia approves
15 cost recovery for the portion of the cost, if they have
16 a portion of the recovery --- cost recovery for Virginia
17 customers. But it will only be for that level of
18 expense. The other allocation factors of the plant will
19 remain as they are.

20 Q. If the revision allocates 100 percent of the
21 cost to West Virginians, would it also allocate 100
22 percent of the capacity from these plants to West
23 Virginia?

24 A. You know, I believe that we would have --- call
25 100 percent and I believe Virginia would have --- call

1 one --- but that's something that will be determined
2 in a future proceeding. I mean, that's a determination
3 by someone else. But West Virginia pays a hundred
4 percent of the cost to keep the plant operating through
5 --- after 2028, I think at that point a hundred percent
6 of the capacity should go to West Virginia ratepayers.

7 Q. Earlier today you testified about Mr. Martin's
8 modeling about the possibility of Mitchell retiring
9 after 2028 or in 2028. And you discussed the
10 possibility that Mr. Martin's models for Wheeling Power
11 would be available --- excess capacity from Appalachian
12 Power Company. Do you remember that?

13 A. Yes, I do.

14 Q. If 100 percent of Amos and Mountaineer capacity
15 is allocated to West Virginia post 2028, would we only
16 be able to produce that excess capacity from their plant
17 to make up for any capacity shortfall post 2028?

18 A. If West Virginia has 100 percent of the
19 allocation capacity from Amos and Mitchell --- Amos and
20 Mountaineer, and assuming that the capacities of
21 Wheeling customers do not change substantially, there
22 will be adequate capacity for those two plants ---.

23 Q. Okay. One thing I wanted to go over today, Mr.
24 Short, on page six of your testimony ---.

25 A. Can you repeat what page you're on?

1 Q. Sure. Sure. So on page six of your
2 testimony.

3 A. Okay. Thank you.

4 Q. And I have a few questions about that.

5 A. Okay.

6 Q. So on page six, do I have it right that you're
7 saying that, you know, because of the conflicts with
8 this Order and because the Virginia Order conflicts, the
9 August 4th Order by itself is not sufficient --- to
10 perform the ELG work at all these plants?

11 A. I think at the time what we presented in the
12 initial case were cost estimates that we were seeking
13 approval, both CCR and ELG, in each of the three
14 jurisdictions, and we had represented what the Company
15 requirement would be for the West Virginia share. The
16 Virginia --- West Virginia Commission approved the ELG
17 work and CCR work, but in my opinion goes further in the
18 Order. It says the cost benefit does not change on a
19 relative basis based on what the other states do.

20 And so we just want to bring information
21 forward to them that --- and it's our reading of the
22 Order, that's how the Commission speaks to the Company.

23 It appears that they're saying this is in the state's
24 interest to do the work at all the plants and we are
25 just updating cost information to them, so they

1 understand what those costs could be.

2 Q. And the information you put forward in your
3 reopening request and relief that you're requesting
4 through that request, that's responsive to that part of
5 the Commission's Order?

6 A. That's correct.

7 Q. And so you're requesting additional relief
8 today in order to get assurance that you can perform ELG
9 work at all three of these plants?

10 A. The things we've asked for in this order we
11 believe would help get the valuable information to upper
12 management to make a decision to progress forward.

13 Q. On page six, starting at line five, you explain
14 that, you know, even if you get everything you're asking
15 for today, you're still going to need to come in and
16 file additional information, a more specific filing for
17 the plant. So even the relief you're requesting today
18 wouldn't be sufficient, on it own, to have assurance to
19 perform ELG work at all three of the plants. Is that
20 accurate?

21 A. That is accurate. I think that's an issue that
22 you have not specifically raised in the original
23 application, because at that time, we were participating
24 in a different approval, with the potential for
25 different approval from the other two jurisdictions.

1 Q. So the Companies are going to be submitting
2 additional information on different topics, including
3 cost allocation and ownership. Is it fair to say the
4 Commission doesn't have enough information today to make
5 decisions affecting cost allocation and ownership?

6 A. I can't speak to the Commission on information
7 to make that decision, but we present to them what we
8 think they need based on what they ask in the Order,
9 what's most important to them, relative to the cost of
10 the CCR and ELG.

11 ATTORNEY MURTHY:

12 Okay. Your Honor, just give me one
13 second to go through my notes here.

14 PAUSE IN RECORD

15 ATTORNEY MURTHY:

16 Nothing further. Thank you, Your
17 Honor, and thank you, Mr. Short.

18 A. Thank you.

19 CHAIR:

20 We will take a ten-minute break and
21 when we come back, we will proceed until we finish.

22 SHORT BREAK TAKEN

23 CHAIR:

24 We are ready for Staff to cross examine
25 Mr. Short.

1 ATTORNEY BRASWELL:

2 Thank you, Chairman.

3 CROSS EXAMINATION

4 BY ATTORNEY BRASWELL:

5 Q. Good afternoon, Mr. Short.

6 A. Good afternoon.

7 Q. I almost hate to go back to this well. I have
8 a question about your description of the cost increase
9 of the compliance improvement plan.

10 A. Okay.

11 Q. You had a lot of questions about that. Has the
12 bid packages been received for that work?

13 CHAIR:

14 I'm sorry, what was that question?

15 ATTORNEY BRASWELL:

16 I'm asking about the increase in cost
17 compliance work at the plants. And there's been a lot
18 of Cross Examination on it. And I asked, have the bid
19 packages been received for that work?

20 A. I cannot confirm. I don't know.

21 BY ATTORNEY BRASWELL:

22 Q. Okay. Do you have an idea of when the
23 Companies anticipate those bid packages will be
24 received?

25 A. I do not.

1 Q. Based on the answers, I think it would be
2 helpful for the record to know, did you calculate those
3 cost increase yourself or were those provided to you?

4 A. They were provided to me.

5 Q. By who?

6 A. I believe some of the same people who worked on
7 the original cost estimates and then passing it through
8 different channels.

9 Q. All right. In your testimony, you describe the
10 status of the proceedings in the two other
11 jurisdictions, Virginia and Kentucky, and you give a
12 summary in your Supplemental Direct of the Kentucky
13 proceedings?

14 A. Yes.

15 Q. Are you aware of recent Orders of the Kentucky
16 Commission discussing the need for a CPCN for the
17 compliance Order?

18 A. No. I mean, I have knowledge, generally, as to
19 the Orders granted in this case and the Order ordering
20 this case.

21 ATTORNEY BRASWELL:

22 Chairman, I have an Order of the
23 Kentucky Commission, in Case Number 2021-00370, and I
24 ask to mark it as Staff Cross Exhibit 1. I've
25 electronically distributed the exhibit to the parties

1 who are not in the hearing room. And for the Commission
2 and the Court Reporter I have prepared pages that are
3 single-sided, but for everyone else, they're double-
4 sided.

5 (Staff's Cross Exhibit 1 was marked for
6 identification.)

7 CHAIR:

8 Thank you. You must have heard that I
9 don't like double-sided Orders.

10 ATTORNEY BRASWELL:

11 I'm a good guesser.

12 CHAIR:

13 Thank you.

14 A. Okay. Thank you.

15 BY ATTORNEY BRASWELL:

16 Q. Would you please turn to page eight of the
17 document and look at ordering paragraph two at the
18 bottom of the page?

19 A. I'm there.

20 Q. Okay. Would you please read paragraph ---
21 ordering paragraph two into the record?

22 A. Sure. A formal conference in this matter shall
23 be held on Thursday, September 23rd, 2021 at 9:00 a.m.
24 Eastern Daylight Time in the Richard Raff Hearing Room
25 at the offices of the Public Service Commission at 211

1 Sower Boulevard, Frankfort, Kentucky, to discuss the AEP
2 strategic review of Kentucky assets; ownership of
3 Mitchell, including whether Kentucky Power has
4 considered selling its interest to Wheeling Power
5 Company and finding other capacity; the need for a CPCN
6 even if WV PSC approves Wheeling's petition;
7 transmission planning and operation; and any other
8 related matters. Commission Staff will contact parties
9 to indicate who should be present from each party.

10 Q. Were you aware the Kentucky Commission was
11 considering the need for a CPCN even if West Virginia
12 PSC approves Wheeling's petition?

13 A. No. This is generally the first time I've seen
14 this Order.

15 Q. As the witness for the Companies, are you
16 asking the Commission to allow Wheeling to proceed with
17 construction of the ELG project without a determination
18 from the Kentucky Commission of whether a CPCN is
19 needed?

20 A. No. I'm asking this Commission if they still
21 stand by the original Order they thought was in the best
22 interest of work at the plant.

23 Q. So the answer to that would be, yes, that your
24 --- that the determination of Kentucky Commission is not
25 relevant to your request before the Commission?

1 A. Well, to be honest, this is the first time I
2 thought about these Orders, so I don't have an
3 opinion ---.

4 Q. With regard to the Virginia proceedings, you
5 discussed those on page four of 12 in your Direct ---
6 your Supplemental Testimony. Is APCo making a
7 commitment to seek cost recovery of the ELG project cost
8 from the Virginia Commission after December 23rd, 2021?

9 A. Yes.

10 Q. In the event that APCo provides the Virginia
11 Commission --- and I'm going to use the words from your
12 testimony --- with additional analyses and evidence to
13 support the ELG investment, but the request is denied,
14 will APCo make a filing in Virginia to address treating
15 the output and capacity of the Amos plant and the
16 Mountaineer plant as nonjurisdictional to that state?

17 A. I do not know.

18 Q. If Wheeling Power purchased Kentucky Power's
19 share of the Mitchell Plant, would Wheeling have an
20 excess capacity?

21 A. Based on today's capacity needs, it'd be in
22 excess of their current needs.

23 Q. That's a fine way to answer the question. So
24 the answer's yes, as qualified in your response?

25 A. Yes, if they knew. Like I said, if they didn't

1 --- I don't know what --- they can review that today,
2 the capacity needs ---.

3 Q. All right. Based on your footnote 1, at page
4 three of your Supplemental Direct, it appears that that
5 the excess capacity owned by Wheeling, if it acquired
6 Kentucky Power's share of the Mitchell plant, would be
7 in excess of 700 megawatts. Is that accurate? Would
8 you like to be more specific? What's your answer?

9 A. Well the Mitchell plant is, you know, somewhere
10 around 1,560 megawatts of capacity. Half of that is 780
11 megawatts. That 780 megawatts that Wheeling Power might
12 use today, so that would be additional capacity levels
13 today.

14 Q. And Wheeling Power is a fixed resource
15 requirement company, a PJM FRR?

16 A. That's right.

17 Q. So this is interesting. Does Wheeling Power
18 monetize excess capacity?

19 A. It's my understanding that in last year's
20 rates, Appalachian Power and Wheeling Power have
21 monetized their excess capacity.

22 Q. Okay. All right. I'm going to read to you ---
23 let me give a little bit more foundation here. You have
24 30 --- 30 years of regulatory experience?

25 A. Yes.

1 Q. And some of that experience was with the
2 Consumer Advocate Division?

3 A. That's correct.

4 Q. Some of it was as in the Quality Assurance
5 Division of the Commission as an advisor. And then some
6 of it was as a witness and expert for Commission Staff.
7 And some of it as a regulatory consultant for
8 Appalachian Power Company.

9 Is that correct?

10 A. That is correct.

11 Q. And in your role with Commission Staff, did you
12 submit testimony in various petition cases with your
13 recommendations on petitions to purchase generating
14 assets?

15 A. Specifically --- yes. I mean, there's ---
16 there's some cases, yes.

17 Q. All right. And one of those included case
18 170894. And that was a petition by Appalachian Power
19 Company and Wheeling Power Company related to the
20 purchase of the Beech Ridge II and Hardin Wind Farm.

21 Do you remember that one?

22 A. Yes, I do.

23 Q. Okay. All right. I'm going to read to you a
24 piece of your testimony, and I want you to explain
25 whether you believe that is accurate today. Okay. And

1 this is from your testimony page six, starting on line
2 five of your Direct. And I know you've filed
3 Supplemental Direct in that case.

4 And here's the quote. Additionally, as stated
5 in the Company's testimony, as a fixed resource
6 requirement, FRR entity within PJM, APCo does not offer
7 capacity into the PJM market for sale. And in parens
8 you cite to your Direct page six. Therefore, unlike the
9 Companies' analysis, I did not include a revenue benefit
10 of the small amount of recognized capacity associated
11 with the wind facilities. So today, does --- is it your
12 understanding whether APCo or Wheeling offer capacity
13 into the PJM market for sale?

14 A. It is my understanding today that I
15 specifically asked that question recently in terms of
16 the general company. At that time, the information was
17 based upon the testimony of that witness, but I've
18 received information since that time that says, yes, in
19 fact it had figures for how much is monetized.

20 Q. And what are those figures for how much was
21 monetized? And do you know what generating assets that
22 would be associated with?

23 A. I do not have that current level of detail.
24 Offhand, it seems like it was something greater than 200
25 megawatts capacity, and that was recently to be

1 monetized. And I think a portion of that came from the
2 AEP operating companies.

3 Q. So is it your opinion that if Wheeling Power
4 purchased Kentucky's share of the Mitchell plant,
5 Wheeling would be able to monetize that excess capacity
6 to the benefit of Wheeling's ratepayers?

7 A. I think it would be, to the extent that they
8 are allowed to monetize, because I think there is a ---
9 on AEP operating companies and they couldn't monetize
10 all of it, but I think they monetized some portion of
11 it.

12 Q. This --- this is based on your testimony today.
13 If the Companies' requests stated in your testimony are
14 granted by the Commission, who is searching for it after
15 2028?

16 A. I don't know.

17 Q. On page 10 of 12 of your testimony, you make a
18 reference to the plants operating beyond 2028. I
19 noticed that you don't phrase the operation of the
20 plants as operate until 2040. Is there a distinction to
21 you between operating beyond 2028 and operating until
22 2040?

23 A. I think the distinction that is without these
24 improvements they actually cannot operate beyond 2028.
25 And so that's where I would find a difference there that

1 it gives you the option --- to operate past 2028 and to
2 some future date ---. But without making these
3 improvements, they actually will not operate
4 functionally ---.

5 Q. If the Companies were to negotiate a purchase
6 of Kentucky Power's share of the Mitchell plant, would -
7 -- would the settlement negotiations exclude any
8 ownership of any portion of an interest in the Conner
9 Run Impoundment, then?

10 A. I'm not saying that it was an issue previously
11 during the --- when the members have shared the plant.
12 I can't --- I can't answer that ---.

13 Q. Do the Companies have a duty to serve their
14 customers?

15 A. Yes.

16 Q. Do the Companies have a dirty --- a duty --- do
17 the Companies have a duty to meet their load
18 obligations?

19 A. They do. They're required to meet their load
20 obligations.

21 Q. You have a description of the Virginia
22 proceedings and the Virginia Order in your testimony,
23 and that's on page 4 of 12. And if you want to refer to
24 that, that's fine.

25 A. Okay.

1 Q. Is there an Order of the Virginia Commission
2 that denies or pivots cost recovery of routine operation
3 and maintenance --- maintenance expenses at the Amos and
4 Mountaineer plants through 2028?

5 A. Is there an Order that permits recovery of
6 that?

7 Q. Or --- or denies.

8 A. I'm not aware.

9 Q. Are O & M expenses at the plants in Virginia
10 recovered through the Companies' base rates in the
11 triannual rate review?

12 A. Yes, I believe so.

13 Q. So cost recovery for those routine operation
14 and maintenance expenses at the Mountaineer and Amos
15 plants may already be recovered through those base rates
16 in Virginia. Is that correct?

17 A. If it's one of those that was allowed in the
18 last proceeding, yes.

19 Q. Earlier in your testimony --- and I'm going to
20 paraphrase and feel free to correct me, if you feel you
21 need to make any distinctions or qualifications. You
22 indicated that if West Virginia ratepayers paid for 100
23 percent of the costs to operate Amos and Mountaineer,
24 that West Virginia ratepayers --- that 100 percent of
25 the capacity should go to the benefit of West Virginia

1 ratepayers.

2 Is that roughly correct?

3 A. That's correct.

4 Q. Would Appalachian Power Company seek a
5 determination from the Virginia Commission that that
6 output and capacity is nonjurisdictional to Virginia?

7 A. I do not know.

8 Q. And so you don't have an idea of when the
9 intention would be to seek that information?

10 A. I don't know.

11 Q. All right.

12 ATTORNEY BRASWELL:

13 Thank you. No further questions.

14 CHAIR:

15 Commissioner Larrick?

16 COMMISSIONER LARRICK:

17 I have no questions.

18 CHAIR:

19 Mr. Short, I have a few questions.

20 A. Sure. Thank you.

21 CHAIR:

22 Turning to your testimony in this
23 reopen case, on page six, you state that the costs of
24 CCR and ELG compliance at Amos, as originally estimated
25 and presented to the Commission, was \$177.1 million of

1 which \$169.9 million was in capital costs. Is that
2 correct?

3 A. That's correct.

4 CHAIR:

5 And you further state on the next page
6 that the total cost of CCR and ELG compliance at
7 Mountaineer, as originally estimated and was presented
8 to the Commission, was \$72.9 million, of which \$70.1
9 million was in capital costs. Is that correct?

10 A. That is correct.

11 CHAIR:

12 For each of those plants, you state
13 that the original estimated Virginia jurisdictional
14 share of the cost was approximately 41 percent. Is that
15 correct?

16 A. That is correct.

17 CHAIR:

18 Beginning on line three, page seven you
19 state that the total estimated cost of compliance for
20 CCR and ELG at Mitchell was \$133.5 million, of which
21 \$131.5 million was in capital costs and that Wheeling's
22 share of total compliance was originally estimated to be
23 50 percent. Is that correct?

24 A. That is correct.

25 CHAIR:

1 Via those numbers, total CCR and ELG
2 compliance costs at all three plants was originally
3 estimated to be \$383.5 million, of which \$371.5 million
4 was in capital costs. Can you verify those totals now,
5 please?

6 A. I'm certain on the \$383.5 and I could add up
7 capitals, if you'd like.

8 CHAIR:

9 I'm sure I'm right.

10 A. I'm sure you are also. I would --- I would say
11 yes, subject to check, that you are.

12 CHAIR:

13 Okay. Thank you. On page seven, line
14 seven you state that based on those estimates and the
15 historical 41 percent allocation to West Virginia for
16 Amos and Mountaineer, and 50 percent West Virginia's
17 share for Mitchell, the original estimated final revenue
18 requirements, after full phase-in of the compliance,
19 would be \$23.5 million the first year after construction
20 was completed and the new facilities were in service.
21 Is that correct?

22 A. That is correct.

23 CHAIR:

24 On line 22 of page seven of your
25 testimony, you state that you have updated those total

1 estimated costs to \$448.3 million. Is that correct?

2 A. That is correct.

3 CHAIR:

4 So compared to the original cost of
5 compliance of all three plants of around \$380 million,
6 you are now saying your updated estimated costs are \$484
7 million. Is that correct?

8 A. That is correct. The estimated costs are about
9 \$65 million higher than they were when the costs were
10 put together in 2020.

11 CHAIR:

12 On page ten of your testimony you
13 present a chart that shows that now, with the updated
14 costs estimate, and considering changes and allocation
15 of ELG costs to West Virginia, the total first year
16 annual revenue requirements that would be the
17 responsibility of West Virginia customers, if there was
18 no change in the Virginia or Kentucky Decisions, would
19 be \$48 million. Is that correct?

20 A. Yes, that's the approximation of the first year
21 goal plan in service.

22 CHAIR:

23 Is that correct that if Kentucky and
24 Virginia persists in their Decisions to reject ELG
25 controls, that all three plants would have to be retired

1 by 2028 if West Virginia did not require the ELG
2 controls, which would also require that West Virginia be
3 responsible for the related revenue requirements of \$48
4 million that's shown on page ten of your testimony?

5 A. I'm sorry, that's kind of a long question.
6 Would you mind repeating that? I apologize.

7 CHAIR:

8 If Kentucky and Virginia persists in
9 their Decisions to reject ELG controls, then all three
10 plants would have to be retired by 2028, if West
11 Virginia doesn't require the ELG controls, which would
12 also require that West Virginia be responsible for the
13 related revenue requirements of \$48 million?

14 A. That is correct.

15 CHAIR:

16 Do APCo and Wheeling have enough
17 capacity, either owned or under contract, to meet their
18 PJM capacity obligations if all three plants are taken
19 out of service?

20 A. They do not.

21 CHAIR:

22 In the record in this case, Mr. Martin
23 testified that shutting down Amos and Mountaineer after
24 2028 would require adding billions of dollars of
25 replacement capacity and energy costs in 2028 through

1 either rate-based investments or Purchase Power
2 Agreements. In fact, the record for Mr. Martin's
3 testimony shows that the replacement capacity and energy
4 would place additional net present value costs on
5 Virginia and West Virginia customers of between \$374
6 million and \$622 million over the costs of complying
7 with CCR and ELG control requirements of Amos and
8 Mountaineer.

9 Would you agree that the \$374 million
10 to \$622 million extra net present value replacement
11 costs are over and above 100 percent of the CCR and ELG
12 compliance costs regardless of which customers are
13 paying for the compliance costs?

14 A. So looking back at Mr. Martin's testimony, he
15 represents, you know, the capital investment to the
16 different projects at the plants, whether it's CCR, ELG
17 or just CCR for ones or only CCR in Amos and
18 Mountaineer. If you go to current dollars for those
19 capital investments, it's \$250 million to the CCR and
20 ELG, both plants, 146 if you do CCR at Amos, and you did
21 CCR and ELG at Mountaineer. And it'd be only \$125
22 million if we only did CCR at those two plants.

23 That's the point at which he said it would
24 require twice the amount of capacity because after 2020,
25 we do not have sufficient capacity ---. He then priced

1 out, over a period of time, what is the cost of making
2 all the investment? That's the \$250 million in CCR and
3 ELG. So that's just his base --- you can look at
4 everything else is a delta compared to that.

5 My understanding --- and I said what's his
6 model. But my understanding, so he --- he took it
7 forward and, you know, had one scenario, where we're
8 going from CCR. At that point, we have in play some
9 capacity in 2028. And so he changes his model to refer
10 additional capacity purchases, as well as look at the
11 ability for energy sales of that excess even longer ---.
12 You can even do the same thing on a more dramatic basis,
13 if you only want CCR for two plants.

14 Once you get that, the total would shrink the
15 revenue requirement for every year and compared that to
16 what the revenue should be if you invest CCR and ELG at
17 the plants. And so just that's the difference. And
18 that's the figure he cited somewhere between \$374
19 million and \$622 million. On that present value, that's
20 how much additional it would cost if you only did the
21 CCR work and had to make other, you know, acquisitions
22 over that time in order to meet your needs.

23 I know that may be a long answer. I just --- I
24 just want to explain what was in his models when you
25 look at them.

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CHAIR:

So that is more than the replacement costs above the CCR, the ELG replacement compliance costs?

A. Yes, because that would include --- under that figure, that net present value, is what we use, \$374 million or up to \$622 million. Plus we add to that the compliance cost of CCR and that's what got you in 2028. Those figures are greater than the cost of --- those CCR and ELG compliance were at this time. That would take you to the first line of this model, which said it would be no different because you have all the work involved in going forward with those assumptions as your base comparison.

CHAIR:

Okay. Would you agree that if West Virginia does require ELG compliance, which according to your revised cost estimates and allocations, it would cost West Virginia customers approximately \$24.5 million per year more than the original APCo estimates in this case? We would then become responsible for roughly 41 percent of the billions of dollars in replacement capacity and energy costs that Mr. Martin testified would be incurred starting in 2028?

A. Yes, and that's exactly what he put in his

1 model, assumptions about requiring that capacity in the
2 future and how you can run the plants, what your end
3 result would be, how much of your energy do you buy from
4 the market. He mastered his model based on the
5 assumptions he had at this time, that's what reduces the
6 additional net present value cost, 374 to 622, over the
7 CCR compliance work.

8 CHAIR:

9 Okay. Looking at the original Mitchell
10 data, APCo presented evidence and testimony that --- and
11 I quote from Mr. Martin's testimony. Quote, the
12 expected impacts of continued operation of Mitchell
13 through 2040 which will be enabled by the ELG compliance
14 investments are very close to neutral on an NPV basis
15 when compared to the next best new capacity resource
16 option if all new resources were required, end of quote.

17 Would you agree that if Mr. Martin was
18 correct in observing that the cost of compliance for 50
19 percent of the Mitchell plant was close to neutral
20 compared to a new best or next best new capacity
21 resource option, if all new resources were required,
22 then it falls mathematically that the cost of compliance
23 for 100 percent of the Mitchell plant would also be
24 close to neutral compared to the next best new capacity
25 resource option if all new resources were required?

1 A. So as I'm understanding, Mr. Martin's analysis
2 first looked at not doing CCR, ELG work and he said it
3 was about neutral, when you look at the net present
4 value. And that's why I know when --- probably doesn't
5 have his testimony in front of him, but if you look at
6 table 1 of his Direct Testimony on page six, you know,
7 it was a positive value, then that those additional
8 costs on net present value basis. Obviously the zero
9 would be zero net present value. And if it's a negative
10 number, it goes the other direction. We're not --- it's
11 very close to zero, so that's why he said near zero.

12 He then compared that to, well, what if you met
13 the net capacity shortfalls in Wheeling and APCo? So
14 we're taking that out of the equation. That's kind of
15 what he's showing here. So if you go forward from
16 there, the assumptions in that table, some of it may
17 change. It could be a hundred percent ownership of the
18 plants. You know, I --- if it's possible that if the
19 plant's there and, you know, market energy prices are
20 favorable and fuel costs are favorable, then it'd
21 continue to be basically close to zero.

22 So that's making a long assumption going
23 forward. I'm just not sure that I've gone that far in
24 this model to confirm your question.

25 At present, I think that our operating costs

1 that we'd be allocating to West Virginia to make
2 additional cost to get to a hundred percent of the
3 plant, I just don't know how that fit into the --- like
4 I said, the net present value going higher or lower once
5 those costs are fully allocated to West Virginia.

6 CHAIR:

7 Let me ask you a few more questions.
8 How many --- how many ---? I think in her in the
9 original case that there were about 200 employees at
10 Mitchell. How many employees are there at John Amos?

11 A. I apologize, I don't have these numbers. I
12 mean, I can just respond to the Commission to reference
13 back in the testimony, if you could find it here. I
14 could find it, too.

15 CHAIR:

16 I'm not sure that --- that the number
17 of employees in the original case were in for
18 Mountaineer or Amos. So do you think that by Tuesday
19 you could provide us with the number of employees at
20 Mitchell, Amos and Mountaineer, and perhaps the number
21 of taxes generated by those three facilities? Like
22 property taxes and B & O taxes and what other taxes that
23 are paid?

24 A. Can I just look at the person to confirm ---
25 because they're ---? Is that something --- yes, we can.

1 I'd be happy to.

2 CHAIR:

3 Okay. Thank you. And that's all the
4 questions I have and so, Mr. Fisher?

5 ATTORNEY FISHER:

6 Just one question.

7 REDIRECT EXAMINATION

8 BY ATTORNEY FISHER:

9 Q. Mr. Short, can you turn to page six of your
10 Supplemental Direct?

11 A. I'm there.

12 Q. And you were discussing in and around line
13 seven with Mr. Murthy a little bit ago. Do you recall
14 that?

15 A. Yes.

16 Q. In line seven you reference --- you use the
17 word date. Do you see that?

18 A. Yes, I do.

19 Q. Are you referring to year 2028 when you say
20 date?

21 A. Yes --- 2028 is the date.

22 ATTORNEY FISHER:

23 That's all the questions I have. Thank
24 you.

25 CHAIR:

1 Mr. Short, you may be excused.

2 A. Thank you.

3 CHAIR:

4 Off the record a moment.

5 OFF RECORD DISCUSSION

6 CHAIR:

7 Mr. Naum, do you want to call your
8 witness?

9 ATTORNEY NAUM:

10 Yes, thank you, Your Honor. WVEUG
11 calls Stephen Barron.

12 A. This --- this is Steve Barron --- I can't ---
13 are you able to hear me?

14 CHAIR:

15 Yes. You're an old pro at this. We
16 can hear you quite well.

17 A. I've been having trouble hearing everybody else
18 except you, Chairman Lane.

19 CHAIR:

20 I told you --- I'm not very good at
21 this, but I'm getting better.

22 -----

23 -

24 STEPHEN J. BARRON, HAVING FIRST BEEN DULY SWORN,
25 TESTIFIED AS FOLLOWS:

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DIRECT EXAMINATION
BY ATTORNEY NAUM:
Q. Good afternoon, Mr. Barron. Could you ---
could you please state your full name and business
address for the record?
A. Yes. It's Stephen J. Barron, J. Kennedy and
Associates, Inc., 570 Colonial Park Drive, Suite 305,
Roswell, Georgia, 30075.
Q. Thank you. And by whom are you employed and in
what capacity?
A. I'm employed by J. Kennedy and Associates, as
president of the firm.
Q. Thank you. And did you previously submit
testimony in this proceeding prior to the request ---?
A. Yes.
Q. And did you have an opportunity to read the
Supplemental Direct Testimony in the Company's filing to
reopen this proceeding?
A. Yes, I did.
Q. And are you prepared to give some Direct
Testimony at this point?
A. Yes.
ATTORNEY NAUM:
Chairman, if I may proceed?

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CHAIR:

Yes, you may.

ATTORNEY NAUM:

Okay. Okay. Thank you.

BY ATTORNEY NAUM:

Q. Mr. Barron, in this case the Companies are requesting, from the Commission, an acknowledgement that additional investments and O & M expenses at the plants will be the responsibility of West Virginia customers. In your opinion, Mr. Barron, what are the key problems with the Companies' request in this regard?

A. Well, based on my many years, 40-plus years of experience, I don't believe that I've been in a proceeding or seen a situation where a utility was requesting rate recovery from its customers for expenses or capital costs that were the jurisdictional responsibility, in the case of Amos and Mountaineer, or the ownership responsibility of another utility.

And basically, based on my experience in dealing with regulatory policies over the years, I don't see how such cost could be deemed to be just and reasonable or prudent.

Q. Do you have any concern, Mr. Barron, with West Virginia ratepayers providing a subsidy to those other states?

1 A. Yes, that's exactly what would occur. And
2 regardless of the economics --- and I know there's been
3 discussions today about the benefits of one or the other
4 --- you know, APCo --- APCo's investment in Amos and
5 Mountaineer and ELG expenditures and the economic
6 benefits. But regardless of that, the proposal that the
7 Companies make in this case that West Virginia customers
8 fund investments and expenses that are attributable to
9 another jurisdiction, or in the case of Mitchell, to
10 another utility, amounts to an unreasonable subsidy.
11 And effectively, irrespective of whether one believes
12 that there are net benefits from the ELG investments as
13 the Commission has found or not, this is a transfer of
14 the net --- whatever net benefits there are from West
15 Virginia customers to the customers of Virginia and
16 Kentucky.

17 Q. All right. Thank you. The Companies also
18 request in this case for a commitment that the
19 Commission will continue to authorize cost recovery, so
20 long as those costs are reasonably and prudently-
21 incurred once the Companies incurs such costs. Mr.
22 Barron, what are the key problems that you see with this
23 request?

24 A. Well, they're --- they're --- essentially
25 they're saying as I've just described. It would almost

1 be an impossibility, mind you, to deem that these
2 expenditures, these capital costs, the net expenses for
3 --- that were paid for by West Virginia customers for
4 benefits that go to another utility, in the case of
5 Kentucky Power, or to another jurisdiction, in the case
6 of Virginia and the Amos and Mountaineer plants, that
7 how those could be reasonable and prudently-incurred.

8 The West Virginia --- basically those costs,
9 again, regardless of whether someone decides, you know,
10 deems that it produces an overall net benefit or not,
11 those costs are not used and useful for the condition of
12 an electric service in West Virginia to serve West
13 Virginia customers. And I'm not a lawyer, I'm simply
14 basing it on my, you know, many years of regulatory
15 experience in many cases. And I just don't see how that
16 can be deemed to be a used and useful expenditure.

17 ATTORNEY BACHA:

18 I --- Madam Chairman, I would object to
19 this line of questioning. In the interest in the length
20 of the hearing, for one thing, but more importantly he's
21 invading the products of the Commission right now. By
22 his own admission, he is not an attorney and to have him
23 comment on how to properly exercise the function of the
24 Commission, it's --- at least in the court of law it
25 would not be permitted.

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CHAIR:

He can go ahead and testify, that's okay. The Commission can sort it all out at the proper time.

BY ATTORNEY NAUM:

Q. Mr. Barron, in testimony Company Witness Mr. Short also mentions the Companies' request for the Commission to instruct the Companies to propose a plan for WPCo's ownership of the entire Mitchell plant after 2028.

What are your concerns with this request?

A. Well, in the first instance, it seems reasonable that the Company, if it believes that this is in the best interest of its customers in West Virginia, should offer and certainly make a proposal to the Commission on its own, if it believes that it's economic to do so. The --- my understanding in the reading of an Order in --- that was issued in the Kentucky case by the Kentucky Commission is that the Kentucky Commission has ordered Kentucky Power to present such a plan to the Commission.

But it's --- it would be Kentucky Power's plan about how we're going to deal with it. The same really should be true with respect to WPCo. But more importantly the --- the economics that --- of the

1 Mitchell unit with respect to an operator investment in
2 ELG expenses for the 50-percent share that WPCo actually
3 owns were --- and again, this is --- there was some talk
4 and questions and testimony about that earlier. My
5 recollection is that the net present value for Mitchell,
6 the ELG investments, post 2028 operation, include the
7 replacement costs of the capacity and all of the other
8 attending costs, was about \$2,000,000.

9 We've heard, we know from Mr. Short's testimony
10 that the costs of --- of the ELG investments have gone
11 up. But more importantly, that \$2,000,000 included the
12 avoidance by --- that WPCo would be able to avoid ---
13 even if it continued operating Mitchell would avoid the
14 cost of replacement capacity.

15 Based on the --- the peak demand forecast that
16 I looked at from Mr. Martin's analyses in the earlier
17 part of this case, the --- there would be no need for
18 the capacity of an additional 50 percent of interest,
19 750 megawatts in additional capacity. That --- that's
20 not --- so essentially the economics of that
21 transaction are entirely different than the first 750
22 megawatts that WPCo actually owns. Because in the ---
23 in the valuation of a transfer of 750 megawatts from
24 Kentucky Power to WPCo, okay, of Kentucky's share, then
25 there would be no offsetting capacity.

1 And so it's somewhat self-evident that the
2 economics would go significantly negative. Basically,
3 the value of that capacity would be the market value,
4 which is the PJM RPM folks. And I think there was some
5 questioning --- and Mr. Short, I wasn't able to hear all
6 of his response, but I am aware in the --- in the PJM
7 tariff that half of our company like the AEP's companies
8 although they're a higher power, have limits on the
9 amount of capacity --- excess capacity of where they're
10 required to reserve under the FRR.

11 There's limits to how much we can offer in to
12 the PJM market. And it's my understanding that it's
13 about --- it's been roughly 1,300, 1,400 megawatts and
14 it's generally --- by AEP. So I --- I don't really see
15 how WPCo could acquire that capacity and somehow turn
16 around and sell it into the market. But I --- nobody's
17 presented any evidence as to how that would work anyway.

18 Q. Okay. Mr. Barron, you just mentioned a lack of
19 evidence. You've been doing this, as you said, for over
20 four decades. In your opinion, this proceeding, what is
21 lacking in the current record in terms of data or
22 information that should be subject to a full process?

23 A. Well, with respect to the --- to WPCo's
24 possible acquisition of Kentucky Power's share of --- of
25 Mitchell, there has been --- there's no economic

1 analysis of it. I mean, this Commission went through a
2 lengthy proceeding when the FirstEnergy companies, Mon
3 Power and Potomac Edison, made a filing to acquire the
4 Pleasants unit's capacity.

5 And that was an extensive proceeding. I was in
6 that proceeding. I --- I don't remember exactly how
7 long it lasted, but my general recollection is probably
8 over six months. There was --- there were numerous
9 economic analyses conducted, many rounds of discovery on
10 those analyses. The company, FirstEnergy, submitted ---
11 performed a market analysis, where they issued an RFP to
12 assess alternative competitive aspects.

13 CHAIR:

14 Mr. Naum, unless I'm missing something,
15 are we in a proceeding talking about the change in
16 ownership of Mitchell?

17 ATTORNEY NAUM:

18 As has been demonstrated in this
19 hearing today, that issue was brought up by Mr. Short in
20 his testimony on page 11. And the request that the
21 Company has asked from the Commission is for an order or
22 for instructions on how they should proceed in the
23 future with the Mitchell plant.

24 CHAIR:

25 Okay. But there's no --- there's no

1 present petition for change of ownership?

2 ATTORNEY NAUM:

3 No, there is not.

4 CHAIR:

5 Okay. Go ahead, though.

6 A. Okay. I've completed my answer, Your Honor.

7 BY ATTORNEY NAUM:

8 Q. And Mr. Barron, in your opinion, again, based
9 on your experience, have the parties had sufficient time
10 in this proceeding to evaluate the Companies' reopen
11 request?

12 A. I'm sorry, could you repeat that again?

13 Q. Yes. In your opinion, as a seasoned expert,
14 have the parties had sufficient time to evaluate the
15 Companies' reopen request in this case?

16 ATTORNEY BACHA:

17 Your Honor, I think ---.

18 CHAIR:

19 Okay, what --- what was your objection,
20 Mr. Bacha?

21 ATTORNEY BACHA:

22 I think he's asking for a legal
23 conclusion as to whether or not there has been due
24 process, Your Honor.

25 ATTORNEY NAUM:

1 No, I asked him as an expert if he's
2 had enough time to evaluate the request.

3 CHAIR:

4 Go ahead and answer it.

5 A. Well, the answer is no, there's just --- there
6 are numerous issues that, in my opinion, haven't been
7 addressed that appear to be in the Company's request for
8 approval by the Commission, questions about commitment
9 for West Virginia ratepayers to pay for the ongoing
10 costs of the ELG share for WPCo, Amos and Mountaineer.
11 And that would include, as I understand it, the post
12 2028 O & M expenses or perhaps capital investments as
13 well, to the extent that the Virginia or Kentucky
14 Commissions continue to not approve recovery of those
15 costs.

16 There's --- there's issues associated with ---
17 for example, how do you handle extensive maintenance
18 outages of the Amos or Mountaineer plant that might
19 occur in 2027? If you were the Virginia Commission and
20 parties in the Virginia case, you would be very
21 reluctant, assuming that the plant was not needed or was
22 uneconomic after 2028, to --- to fund those kinds of
23 investments.

24 Would those become, then, the responsibility of
25 ratepayers? I understand the Company's not asking for

1 anything specific in this case, but those are the kinds
2 of issues that it seems to me should be resolved in
3 setting up this --- this process. And there's probably,
4 you know, many more issues that simply haven't occurred
5 to the various parties that --- that need to be
6 answered.

7 BY ATTORNEY NAUM:

8 Q. Mr. Barron, you just mentioned that you
9 understand that the Companies are not requesting
10 anything in terms of rate change at this time, but how
11 do you respond to their claim in evidence that they're
12 not asking for a rate change?

13 A. Well, they're --- they certainly are. They're
14 not asking for immediate rate change of the surcharge.
15 But clearly if the Commission approves West Virginia
16 ratepayers to cover the ELG costs for Amos, Mountaineer
17 and Kentucky that are nonjurisdictional, then that
18 surcharge is going to have to reflect that. And so, if
19 there --- there technically is a request in this case,
20 it seems to me, for a rate change.

21 I think my entire comment refers to the
22 commitment by the Commission to cover other kinds of
23 costs not related to ELG, but those maybe that might be
24 necessary to keep the units at issue beyond --- running
25 beyond 2028.

1 Q. Mr. Barron, based upon your review of the
2 Companies' petition at present, and the evidence that
3 they've presented, what is your recommendation to the
4 Commission?

5 A. My recommendation is for the Commission to
6 reject the costs. And if the Company and its
7 shareholders believe that these are economic
8 investments, the AEP shareholders should be willing to
9 fund the costs for ELG, at least initially until this
10 proceeding --- you know, more information can be
11 introduced so the Commission can hold an evidentiary
12 hearing on the economics involved in --- in --- given
13 that the cost increases, changes in other assumptions in
14 the economic analysis, and of course the higher --- the
15 increase, where the West Virginia ratepayers pay a
16 hundred percent of the shares of the --- of the ELG
17 costs.

18 Finally, I think it's inappropriate for the
19 Company to put the onus on the Commission to order them
20 to do this --- you know, decide what they want to do
21 with Mitchell. The Company knows what the situation is
22 and needs to come forth with a proposal if they want
23 WPCo to acquire an additional share of the Mitchell
24 unit.

25 Q. Mr. Barron, do you have any final thoughts on

1 this case?

2 A. Well, my biggest --- I'm --- I'm here on behalf
3 of the West Virginia Energy Users Group and these
4 customers are paying very substantial rates. As we've
5 examined evidence in prior cases, I think most recently
6 an ENEC case, the Company's average tariff rates for ---
7 for LCP and IP, large industrial customers, are over \$60
8 a megawatt hour. And it's becoming clear that it's no
9 longer competitive advantage paying those rates.

10 We're --- the Company is now filing, in this
11 case, a request to increase what otherwise would be that
12 \$60 rate. And it's important for the Commission to
13 consider, I believe in its decision-making, the impact
14 on customers. And it's not just WVEUG members. I saw a
15 pleading by the West Virginia Manufacturer Association,
16 which represents many, many more industrial customers,
17 that they oppose the proposal.

18 Q. Thank you, Mr. Barron. Does this conclude your
19 Direct Testimony?

20 A. Yes.

21 ATTORNEY NAUM:

22 Then Mr. Barron is available for Cross
23 Examination, Your Honor.

24 CHAIR:

25 Mr. Bacha.

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ATTORNEY BACHA:

Thank you, Your Honor.

CROSS EXAMINATION

BY ATTORNEY BACHA:

Q. Good afternoon, Mr. Barron. Can you --- can you hear me okay, sir?

A. Mr. Bacha?

Q. Good to see you again, sir. Hope you're well.

A. I'm doing fine, thank you.

Q. A couple questions for you, sir. Would you agree with me that the cost allocations change between jurisdictions almost as a matter of course?

A. I --- I'm missing the last part. Is a --- is a --- I mean I got the cost allocations between jurisdictions. I didn't hear the --- just repeat the end of that.

Q. Sure, changing cost allocations between jurisdictions is --- is a normal occurrence in rate cases?

A. Yes. It's actually not that common. Regulatory Commissions in general are trying to --- trying to keep stable the jurisdictional cost allocation. Retail cost allocation, that's a different story. But because you don't want, generally, the desire not to enter the --- with track costs or excess

1 costs, jurisdictions tend to keep jurisdictional
2 allocation methodologies stable at the time. But
3 generally, they can change.

4 Q. Do you recall when Century Aluminum ceased
5 operations in West Virginia, sir?

6 A. Yes.

7 Q. I'm going to try to speed this up a little bit.
8 Do you know when Century Aluminum ceased operations in
9 West Virginia, whether Virginia picked up a share of the
10 costs that had been incurred to provide generation for
11 Century Aluminum?

12 A. I don't know. I don't know the answer to that.

13 Q. You --- you were around when the ownership of
14 Amos was transferred, the partial ownership of Amos that
15 had previously been in Ohio Power was transferred to
16 the, to Appalachian Power Company. Correct, sir?

17 A. I --- I'm sure I --- at the time I --- I was
18 knowledgeable on that. I don't recall at this point.

19 Q. Okay. But --- but ownership changes have
20 occurred and do occur among utilities; correct?

21 A. Yes. Mitchell, when WPCo acquired Mitchell and
22 Kentucky Power acquired Mitchell, that was an ownership
23 change in a plant.

24 Q. So Mr. Barron, you testified, as you indicated
25 in the response to questions by Counsel, in the initial

1 hearing in this case; right?

2 A. Yes.

3 Q. And in your opinion, was --- the possibility of
4 Virginia and Kentucky not agreeing to ELG investments,
5 were you aware of that when you testified sir?

6 A. No.

7 Q. So --- so you didn't read the data request
8 response to Sierra Club's request, where it --- where it
9 basically asked what would the company do if --- if
10 there were conflicting Decisions from the Commission?

11 A. Yes. I was aware of that. As a matter of
12 fact, I --- I'm not certain of this, but I have
13 recollection WVEUG issued a data request of that nature
14 or something like that.

15 Q. I think you're right. Did you address that in
16 your testimony, sir?

17 A. I don't recall addressing that, no.

18 Q. In fact, you --- you addressed what was the
19 appropriate way to collect costs for a higher CCR or
20 ELG, and recommended that that be through a rate case.
21 Wasn't that the gist or the bulk, if you will, of your
22 testimony in the original proceeding?

23 A. Well, my recollection is that I addressed that
24 issue, I addressed the rate of return on equity issue.
25 And I also addressed the --- made a recommendation that

1 the Commission not approve the recovery of the Mitchell
2 ELG costs through the surcharge, given the economics,
3 the de-minimis economics of that investment. It wasn't
4 a recommendation not to do the investment one way or the
5 other. It was simply not to allow, in the surcharge, a
6 recovery of that cost, but rather let the company absorb
7 that in a standard accrual basis and make a request at
8 the time it becomes operational, in a base rate case.

9 Q. Thank you very much, Mr. Barron.

10 ATTORNEY BACHA:

11 That's all I have, Your Honor.

12 CHAIR:

13 Sierra Club?

14 ATTORNEY BECHER:

15 No questions. Thank you, Your Honor.

16 CHAIR:

17 Coal Association?

18 ATTORNEY JACOB ALTMAYER:

19 Yes, just a couple of questions, Madam
20 Chairman.

21 CROSS EXAMINATION

22 BY ATTORNEY JACOB ALTMAYER:

23 Q. In rendering an opinion, Mr. Barron, today,
24 that it's not reasonable to conclude for this Commission
25 to approve the request, and, in fact, recommending that

1 the Commission should reject the request, are you
2 considering the impact of the closure of these plants on
3 local and statewide employment?

4 A. I have not done any analysis and I'm not
5 recommending that plants be closed or not. My
6 recommendation is that the Company's proposal in this
7 case, to require West Virginia ratepayers to pay a share
8 of costs that would otherwise under normal ratemaking be
9 paid by Virginia and Kentucky, that that be rejected.
10 Certainly if any shareholders believe that these are
11 economic investments, they can make those investments
12 and see where things come out, provide additional
13 economic analyses in the future to this Commission and
14 other Commissions. So it --- I --- I don't agree with
15 your premise.

16 I also --- I think with respect to another part
17 of the question, with regard to prudence, my point on
18 prudence was, based on my experience, and given the fact
19 that these costs are not used or useful for West
20 Virginia ratepayers or by utility service that it's ---
21 most costs are really the responsibility of other
22 jurisdictions that you could not satisfy a prudent
23 standard, which was the criteria ---. I think that Mr.
24 Short addressed it in his testimony, that the Company
25 would only recover prudent costs.

1 Q. Yeah, but then you'll agree with me, then, and
2 saying --- but you will agree with me that in forming
3 your opinion that this Commission should reject or
4 request, you did not consider the impact of the plant
5 closure on the local economy, the State economy, the
6 employment or tax revenues?

7 ATTORNEY NAUM:

8 Objection, Your Honor.

9 BY ATTORNEY JACOB ALTMAYER:

10 Q. That you're looking at is solely with respect
11 to commercial ratepayers and residential ratepayers,
12 isn't that correct? Yes or no?

13 A. Yes, that's correct. That I did not do that
14 analysis. I --- I, it's important, though, to --- to
15 amplify that by saying that the rate impact on
16 customers, and particularly large manufactures in West
17 Virginia, that employ thousands of people, and the West
18 Virginia Manufacturing Association, that employs,
19 presumably, thousands of people, those ---. I --- I
20 didn't do a calculation on the impact on those jobs
21 either. But that works --- those impacts are also
22 important, I think, for the Commission to consider.

23 ATTORNEY JACOB ALTMAYER:

24 I have no further questions, Madam
25 Chairman.

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CHAIR:

Thank you. Consumer Advocate.

ATTORNEY WILLIAMS:

No questions, Your Honor.

CHAIR:

Citizens Action Group.

ATTORNEY BRASWELL:

Can you say that a little bit louder,
Chairman?

CHAIR:

Citizens Action Group.

ATTORNEY FISK:

I apologize, no questions, Your Honor.

CHAIR:

Okay, Ms. Braswell?

ATTORNEY BRASWELL:

No questions, Your Honor.

CHAIR:

The closer we get to 5:00, the less
talkative people get. Okay, Commissioner Larrick?

COMMISSIONR LARRICK:

No questions.

CHAIR:

Well, Mr. Barron, I hate to disappoint
but I don't have any questions either. Thank you

1 for ---.

2 A. Well, I --- I am disappointed, Madam
3 Chairman ---.

4 CHAIR:

5 Well, I --- I will ask you this.

6 A. That's okay.

7 CHAIR:

8 No, no. I will ask you this. Are ---
9 most of the clients that you are representing today, are
10 they under special contract or are they under a tariff?

11 A. I think in the --- based on the most recent
12 information that I have, the --- I think there was one
13 member of the West Virginia Energy Users Group that is
14 participating in this proceeding that is on a special
15 contract. Two of the members are on special contracts,
16 but they actually pay rates based on the LCP/IP tariff.
17 The others I believe are standard tariff customers.

18 CHAIR:

19 Okay.

20 A. There may be one customer in the --- as --- as
21 I understand it would be under a special contract.

22 CHAIR:

23 Okay. Thank you. So you may be
24 excused.

25 ATTORNEY NAUM:

1 Your Honor? Your Honor?

2 CHAIR:

3 Yes?

4 ATTORNEY NAUM:

5 Even though I have a six-hour drive and
6 don't want to belabor this longer, can I have one
7 Redirect question?

8 CHAIR:

9 Yes, you may.

10 ATTORNEY NAUM:

11 Thank you.

12 REDIRECT EXAMINATION

13 BY ATTORNEY NAUM:

14 Q. Mr. Barron, Counsel for the Coal Association
15 asked you if in your review and recommendation in this
16 case if you've considered the impacts on the closure of
17 those coal plants. Mr. Barron in your opinion, if the
18 Commission rejects the request in this case, does that
19 mean that those plants have to close?

20 A. No. That's what --- first of all, what we're
21 talking about is the post-2028 period. Second of all, I
22 --- I'm not recommending that those plants be closed.
23 I'm simply recommending that the Commission reject the
24 rate-recovery proposals and the other provisions that
25 the Company has put forward. The Company is free and --

1 - certainly from my perspective to elect to make those
2 ELG investments if they believe that it is economic, and
3 can justify it for possible future rate recovery if the
4 economics prove that out.

5 But under --- but based on this filing, I ---
6 I'm recommending it should be rejected. But I'm not
7 recommending that the plants be closed. And so, the ---
8 the premise, I guess, of the question by the Coal
9 Association was hypothetical.

10 Q. Great. Thank you.

11 ATTORNEY NAUM:

12 That's all I have.

13 CHAIR:

14 Okay. Thank you. Thank you, Mr.
15 Barron.

16 A. Thank you, Your Honor.

17 CHAIR:

18 Okay. Our next witness --- CAG, you
19 can call your next witness. And I see it's Mr. Wilson,
20 who you asked to testify after 12:30 p.m. Well, we were
21 certainly able to accomplish that. And I guess you
22 should've asked that it be 12:30 on Friday, so we are
23 accomplishing that.

24 ATTORNEY MURTHY:

25 Hi, good afternoon. Now can you hear?

1 Great, okay.

2 -----

3 -

4 JAMES WILSON TESTIFIED AS FOLLOWS:

5 -----

6 DIRECT EXAMINATION

7 BY ATTORNEY MURTHY:

8 Q. Mr. Wilson, can you please state your full name
9 and your business address for the record?

10 CHAIR:

11 No, we --- we can't hear you.

12 ATTORNEY MURTHY:

13 Can you get closer to the --- can you
14 get closer?

15 A. Can you hear me now or no? 4800 Hampton Lane,
16 Suite 200, Bethesda, Maryland 20814. My --- I can dial
17 in, if that would be better?

18 CHAIR:

19 I think that would be better.

20 PAUSE IN RECORD

21 A. Okay. I believe someone needs to let me in.
22 Okay, I'm waiting. Okay, I got an echo. I'm not sure
23 why I'm getting an echo, because I'm muted on the
24 Microsoft Teams. If I --- maybe if we could turn the
25 sound off on the app? Which sound? Well, I --- I've

1 got to turn my --- my hand's free, so ---. Maybe we'll
2 go back to the ---.

3 ATTORNEY MURTHY:

4 Let's go back and try that.

5 A. Is that good enough? Can you hear me well
6 enough? I can hear you loud and clear.

7 CHAIR:

8 Okay, I can hear you.

9 A. Okay, let's go with this.

10 BY ATTORNEY MURTHY:

11 Q. Okay. Mr. Wilson, can you again just please
12 state your full name and business address for the
13 record, please?

14 A. Yeah. James Wilson, 4800 Hampton Lane, Suite
15 200, Bethesda, Maryland, 20814.

16 Q. Thank you, Mr. Wilson. Today you're here
17 testifying on behalf of West Virginia Citizens Action
18 Group, Solar United Neighbors and Energy Efficient West
19 Virginia; is that right?

20 A. That's correct.

21 Q. You submitted Supplemental Direct Testimony in
22 this case consisting of 13 pages of questions and
23 answers. Is that right?

24 A. That is correct.

25 Q. Do you have that testimony in front of you?

1 A. I do.

2 Q. Okay. Do you have any corrections or
3 clarifications to that testimony?

4 A. No.

5 Q. If you were asked the same questions right now
6 that you responded to in testimony, would your answers
7 be the same?

8 A. I believe --- yes, they would be the same.

9 Q. Are you able to answer questions regarding your
10 testimony sitting here today?

11 A. Yes.

12 Q. Okay. Do you adopt your testimony as part of
13 your evidence in this case?

14 A. Yes.

15 ATTORNEY MURTHY:

16 Your Honor, we move to enter Mr.
17 Wilson's Supplemental Direct Testimony into the record
18 and it would be Exhibit JFM-SD.

19 (WWEV Exhibit JFW-SD was marked for
20 identification.)

21 CHAIR:

22 It may be admitted to the record, if it
23 hasn't already been admitted.

24 ATTORNEY MURTHY:

25 That would be fine. And we offer the

1 witness for Cross Examination.

2 CHAIR:

3 Okay. Thank you. Mr. Fisher.

4 ATTORNEY FISHER:

5 Yes. Mr. Wilson ---?

6 A. Yes, hello. Sorry, need to close the door.

7 CROSS EXAMINATION

8 BY ATTORNEY FISHER:

9 Q. No --- no worries. Mr. Wilson, can you hear me
10 okay?

11 A. I can.

12 Q. Okay. Can you please turn to page three of
13 your Supplemental Direct that was filed this morning?

14 A. Yes.

15 Q. Do you see question number eight?

16 A. I do.

17 Q. And it --- and in that question and answer, are
18 you reiterating what your recommendation was to the
19 Commission previously in this case?

20 A. Yes.

21 Q. And that recommendation was that the Company
22 should pursue alternative number two, meaning no ELG
23 investment at the Mitchell Plant and that that plant
24 would retire by 2028. Do I have that right?

25 A. Correct.

1 Q. Do you --- so I take it from reading your
2 Supplemental Direct that you stand by that
3 recommendation still today?

4 A. Yeah.

5 Q. Were you able to attend any of the proceedings
6 here today by --- virtually?

7 A. Some of it, yes.

8 Q. Did you hear reference to the date October
9 13th, 2021?

10 A. Yeah, a few times.

11 Q. And do you recall ever hearing that date
12 earlier in this proceeding, before it was reopened?

13 A. Yeah, I believe so.

14 Q. Your Supplemental Direct Testimony does ---
15 does not address that date in any way, does it?

16 A. No.

17 Q. And your Supplemental Direct Testimony also
18 does not address the dates on which the Kentucky and
19 Virginia Commissions issued their Orders as to ELG
20 investments. Is that correct?

21 A. That's correct. My main focus was the lack of
22 information on which to base the decision --- the
23 decision in its entirety.

24 Q. Thank you, sir.

25 ATTORNEY FISHER:

1 That's all the questions I have.
2 CHAIR:
3 Mr. Naum?
4 ATTORNEY NAUM:
5 No questions, Your Honor.
6 CHAIR:
7 Sierra Club?
8 ATTORNEY BECHER:
9 No questions. Thank you.
10 CHAIR:
11 Coal Association?
12 ATTORNEY JACOB ALTMAYER:
13 No questions, Your Honor.
14 CHAIR:
15 Consumer Advocate?
16 ATTORNEY WILLIAMS:
17 No questions.
18 CHAIR:
19 Staff?
20 ATTORNEY BRASWELL:
21 No questions.
22 CHAIR:
23 Commissioner Larrick?
24 COMMISSIONER LARRICK:
25 No questions.

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CHAIR:

And I have no questions. So any
Redirect of no questions for Mr. Wilson?

ATTORNEY MURTHY:

No. We don't have any Redirect, Your
Honor. Thank you.

CHAIR:

Thank you. Well, thank you, Mr.
Wilson.

A. Thank you.

CHAIR:

Okay, Ms. Braswell, do you want to call
your witness? Mr. Wilson, you may be excused.

ATTORNEY BRASWELL:

Thank you, Chairman. As a housekeeping
matter, I believe that I forgot to request to move Staff
Cross Exhibit 1 to evidence and I'd like to request that
now.

CHAIR:

Okay, it may be admitted to the record.
And any other exhibits that were marked today that
haven't been admitted into the record?

ATTORNEY WILLIAMS:

I believe I haven't moved Cross
Examination Exhibit 3 for the CAD and the ---.

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CHAIR:

Okay. Any other exhibits that had been marked that haven't been admitted into the record may be admitted into the record. So Ms. Braswell, you may call your witness.

ATTORNEY BRASWELL:

Thank you, Chairman. Commission Staff calls James E. Weimer.

-

JAMES E. WEIMER, HAVING FIRST BEEN DULY SWORN, TESTIFIED AS FOLLOWS:

DIRECT EXAMINATION

BY ATTORNEY BRASWELL:

Q. Would you please state your full name for the record?

A. My name is James E. Weimer.

Q. Mr. Weimer, are you the same James E. Weimer who previously prepared and caused to be filed your prefiled Direct Testimony in this case?

A. Yes, I am.

Q. Do your qualifications, work experience and educational background remain the same?

A. Yes, they do.

1 Q. Okay. Have you reviewed information with the
2 West Virginia Department of Environmental Protection
3 this week?

4 A. Yes, I did.

5 Q. Did you consult with DEP employees?

6 A. Yes, I did.

7 Q. And did you also travel to DEP offices and
8 review documents?

9 A. No, I did not. They were busy sending --- too
10 busy to accept me.

11 Q. Okay. Did you review any documents?

12 A. Yes, I did.

13 Q. And based on --- based on your review, do you
14 have any information concerning the status of the three
15 plants ---?

16 A. Well, as stated previously, the APCo plant has
17 been out --- and objected. Mountaineer is out for
18 comment, as well as Mitchell.

19 Q. All right. And the first --- the first plant
20 that you named was the APCo plant. Did you ---?

21 A. I mean the Amos plant.

22 Q. Okay. All right. So the Amos plant --- is the
23 permit in draft form?

24 A. No, ma'am, no. It is in final form. Well, its
25 final is --- it's missing a couple of things, at least

1 the copy that I have.

2 Q. Okay. All right. Thank you very much.

3 ATTORNEY BRASWELL:

4 No further questions.

5 CHAIR:

6 Ms. Blankenship. You know, these masks
7 are sort of nice. When you take them off, I know which
8 one's going to speak.

9 ATTORNEY BLANKENSHIP:

10 I'm very glad it's my turn to speak.

11 Sorry, I took it off.

12 CROSS EXAMINATION

13 BY ATTORNEY BLANKENSHIP:

14 Q. And I'm also very glad, Mr. Weimer, that we're
15 finally here ---.

16 A. Thank you.

17 Q. You're right in front of me. And I just have a
18 few things, and they relate to the testimony that you
19 filed earlier, the written prefiled Direct Testimony in
20 this case on May 6th, 2021. And as I was reviewing, in
21 preparing for this hearing, I was reminded of, it's a
22 very nice comprehensive summary of the Companies'
23 application, original application filed I think late in
24 December of last year and a very thorough overview of
25 what the Companies originally asked for.

1 And in fact, I think you mention in your
2 testimony --- and I'm looking at page three. And it may
3 be mentioned more than once. You referenced this
4 October 13th, 2021 deadline that has, in great part,
5 caused us to be here today. Is that correct?

6 A. Yes, ma'am, that's correct.

7 Q. Okay. And --- and so, you were very familiar
8 with the significance of that date and the implications
9 of what it meant and the deadline it imposed on the
10 Companies at that time?

11 A. Yes, ma'am. Yes, I was.

12 Q. And most of your testimony really kind of goes
13 through a summary of the work that the Companies
14 proposed and what they were asking from the Commission,
15 and a little bit of a summary of the EPA regulations
16 that are important here. And then at the end, you ---
17 you go over --- you touch a little bit on the costs.
18 And I believe you --- you reference in your testimony
19 that the --- I'm looking at page 20. The last question,
20 starting on line 23, the question was your evaluation to
21 proposed projected costs. And you reference there that
22 the evaluation of the cost is based off estimates and
23 much work will proceed in advance of the bid packages.
24 Is that correct?

25 A. Yes, ma'am, that is correct.

1 Q. So it's your understanding that the costs that
2 were provided at that time with the original application
3 were --- were estimating and that future bidding would
4 take place. Is that correct?

5 A. Yes, that is correct. I've had several
6 concerns about the cost, because there's low-ball
7 estimates and --- as I suspected, it was causing some
8 significant changes, once we had the bid packages out.

9 Q. So you're not surprised that the costs have
10 been increased since they were based on the bidding
11 process and the process involved in --- in this type of
12 proceeding?

13 A. No, not --- not at all. Simply because of
14 what's happened within the economy, as well as the fact
15 that once you actually get bids ---. Quite frankly, the
16 designs were not even complete at that time. They were
17 almost there, but that would have had a major effect on
18 what the costs would eventually become once that comes
19 out.

20 Q. And the bidding process and the estimates early
21 on, would you say that that's sort of typical in an MO
22 project like this, that costs can be expected to become
23 more accurate and sometimes increase?

24 A. Yes. Oftentimes estimates have a tendency to
25 increase, especially if their estimates are a little

1 ahead of when they're going to be released.

2 Q. And I believe on page 21, line three, you give
3 your opinion and state that the estimated project costs
4 fall in the range of reasonableness for this type of
5 work?

6 A. Yes, ma'am. That is --- and that's why a lot
7 of the detail was included in my here testimony to show
8 just what the amount --- what was going to be done and
9 how much it would entail, why we made recommendations
10 that that cost be used.

11 Q. And do you have any reason to believe that that
12 has changed at this point?

13 A. No, I do not.

14 Q. Thank you.

15 ATTORNEY BLANKENSHIP:

16 That's all I have.

17 CHAIR:

18 WVEUG?

19 ATTORNEY NAUM:

20 No questions. Thank you.

21 CHAIR:

22 Sierra Club?

23 ATTORNEY BECHER:

24 No questions, Your Honor.

25 CHAIR:

1 Coal Association?

2 ATTORNEY JACOB ALTMAYER:

3 No questions, Your Honor.

4 CHAIR:

5 Consumer Advocate?

6 ATTORNEY WILLIAMS:

7 Just one question, Your Honor.

8 CROSS EXAMINATION

9 BY ATTORNEY WILLIAMS:

10 Q. Mr. Weimer, in your review, do you know whether
11 the Company has submitted these projects to bid yet?

12 A. I do not know, other than the testimony I heard
13 here today. That --- I believe Mr. Short indicated that
14 he did not have time to get a lot of this information.

15 Q. Thank you.

16 CHAIR:

17 Citizens Action Group?

18 ATTORNEY MURTHY:

19 No. We have no questions, thank you.

20 CHAIR:

21 Commissioner Larrick?

22 COMMISSIONER LARRICK:

23 No questions.

24 CHAIR:

25 Mr. Weimer, just to make sure that I

1 understand this.

2 A. Yes, ma'am.

3 CHAIR:

4 Explain to me the significance of the
5 October 13th date.

6 A. Well, my understanding of that date was they
7 had to make a commitment by that date of what they were
8 going to do, because that was a date set by the EPA on
9 their party dates when the Company had to determine how
10 they were going to proceed to meet the EPA requirements.

11 I also understood that that could be adjusted
12 at some point if they made some sort of second pilot.
13 And I believe that still is all of the requirements for
14 meeting the requirements to meet all the EPA
15 requirements will still be made for that second pilot.
16 It could not make the changes any less than what EPA had
17 already asked them to do, required them to do.

18 So --- and also I believe, and I think the
19 permit has indicated that, that they can make a second
20 filing at a later date, if necessary, and if there are
21 significant reasons for that filing.

22 CHAIR:

23 Okay. Thank you. Ms. Braswell?

24 ATTORNEY BRASWELL:

25 No Redirect, Your Honor.

1 CHAIR:

2 Okay.

3 ATTORNEY BRASWELL:

4 I have no further witnesses.

5 CHAIR:

6 That brings us to the end of the
7 testimony. Thank you, Mr. Weimer.

8 A. Thank you.

9 CHAIR:

10 So now we come to the end of this long
11 hearing. And because we are on a short time frame, we
12 will have oral closing arguments. And we have two
13 choices. We can proceed now or we can have a five-
14 minute break and then we can proceed.

15 So what is your choice? Mr. Bacha, you
16 raised your hand first, so you can speak.

17 ATTORNEY BACHA:

18 Well, I think --- Your Honor I'm in ---
19 I'm in favor of the five-minute break, Your Honor.

20 CHAIR:

21 Okay. Five-minute break it is.

22 ATTORNEY BLANKENSHIP:

23 Your Honor, could I make a request
24 while we're still on the record? In lieu of the late
25 time, and I know that myself and some of my Co-counsel

1 might have an opportunity, if it's a short one, to put
2 down ---. As the Commission has given the Company until
3 Tuesday to submit additional exhibits, I'd like to make
4 a request that the Company allow parties to submit short
5 briefs no later than Tuesday on --- on these issues.

6 CHAIR:

7 The Commission requested this
8 information for Tuesday. And we made a determination
9 prior to today's hearing that we would allow oral
10 argument. And so oral argument it's going to be. And
11 so we're going to take a five-minute break to allow you
12 all to prepare, and for other reasons. And so we will
13 be back in five minutes.

14 SHORT BREAK TAKEN

15 CHAIR:

16 I realize I forgot to tell you how we
17 were going to do this. It will be five minutes for each
18 party, and the Company will start. And then the Company
19 will get five minutes rebuttal at the end. So Mr.
20 Bacha, are you starting?

21 ATTORNEY BACHA:

22 Yes, Your Honor. Thank you.

23 CHAIR:

24 Okay. You may start.

25 ATTORNEY BACHA:

1 Thank you, Your Honor. May it please
2 the Commission, in five minutes I'm going to try to
3 cover a number of things. I wanted to point out a few
4 things I think are agreed upon facts. That is that
5 October 13th, coming up soon, is a decision point that
6 the Company has to meet. I don't think there's any
7 dispute about that.

8 It's been known for a long, long, time
9 coming --- in his testimony and in our application it's
10 discussed here. We have the opportunity to either file
11 an NOPP, which basically says we're going to retire the
12 plant in 2028, or not to file anything, and to proceed
13 down the path of making both the CCR and ELG investments
14 as shown on the attachment Mr. Spitznogle went through
15 and provide the opportunity for that plant --- all three
16 plants to continue to operate beyond the 2028 date that
17 they would need to retire if they only did investments
18 for CCR.

19 There's also a number of other things
20 that I think we should agree upon, that occurred since
21 the June 8th and 9th hearing, in this --- at this
22 Commission. First the Kentucky Commission issued its
23 Order, saying it did not agree with ELG investment at
24 the Mitchell plant. The Virginia Hearing Examiner
25 issued her recommended report, the recommended Decision,

1 saying at this time she didn't think Virginia should
2 approve the ELG investment. The Virginia Commission
3 later, after the Commission's Order in this case,
4 adopted that pretty much, but allowed the opportunity
5 for APCo to come back in and make a case for it to have
6 Virginia pay a share of ELG investments to both of those
7 units, the Amos and Mountaineer plants.

8 There's been a lot of discussion today
9 about Commission Orders. I have always been taught in
10 my 40 years of practicing law that the Commission Orders
11 speak for themselves. So I am not going to go into
12 detail about them, but I will point out that the
13 Commission had this information available to it on
14 August 4th when it made its Decision. I also want to
15 point out that the parties were well-aware of the
16 possibility of inconsistent or conflicting decisions
17 among the three Commissions. I asked Mr. Barron just
18 that question. He admitted that there was discovery.

19 They --- the parties had an opportunity
20 to address those issues and what should be done. What
21 the Company said to do in response to those discovery
22 requests was that it would make every effort to --- to
23 figure out what to do once it knew what each Commission
24 said. That's what we're here today about.

25 We have a decision point, October 13th.

1 We need the Commission's guidance about what it wants us
2 to do in order to meet that decision date. And I'll
3 just repeat one sentence from the Commission's Order.
4 They --- you found --- and this is from page 18 of
5 your August 4th Order. Based on the extensive record
6 before us, we find that the upgrades at all three power
7 plants are prudent, cost-effective and in the best
8 interest of the current and future utility customers,
9 the state's economy and the interest of the Company.
10 They looked at --- you looked at the evidence, you
11 looked at the law and you looked at public policy.

12 What we are asking from the Commission
13 is reasonable assurance that will allow us to proceed
14 down the path of installing those ELG investments at all
15 three plants. The --- several of the other parties have
16 raised a number of issues about the future. We
17 understand that this hearing is not about everything.
18 Mr. Short testified that when asking for instruction to
19 file another case that will deal with things like
20 ownership, the operating agreement, more specific
21 allocations. But that's the future.

22 What we need now before October 13th is
23 some direction to --- about how the Commission wants us
24 to proceed and what we've said is that with the three
25 things that we've asked for in our --- listed both in

1 our Petition to Reopen, and in Mr. Short's testimony,
2 that we will be able to make an informed decision
3 whether to go down the path that is on the Company
4 Exhibit A, which I think has also been labeled Company
5 Exhibit 1, and decide whether we can do CCR and the ELG
6 option or should we make the election to potentially
7 retire those plants in 2028. A lot of the Intervenors
8 seem to suggest that that's what we ought to do.

9 If the Commission wants us to follow
10 that path, we will certainly consider that when we make
11 our decision. But we want to make sure the Commission
12 understood several things. Number one, costs have
13 increased. Mr. Weimer testified and on his Cross,
14 estimates are estimates, they do go up, but there are a
15 lot of potential difficulties with ruling back an NOPP
16 that says we're going to retire those plants in 2028.
17 And Mr. Spitznogle was cross examined at length about
18 them. There are technical difficulties related to the
19 VIP option and the member --- the membrane solution of
20 FGD wastewater.

21 But perhaps more importantly, the
22 issues have to do with whether the West Virginia DEP
23 will change the permits to allow --- after these are
24 plants are going to retire to allow us then to move
25 forward with the ELG. And even if they agree, Mr.

1 Spitznogle's testimony that the federal EPA has veto
2 power over that. So we have to convince them.

3 All we're telling the Commission is
4 it's in your hands. If you want us to go forward,
5 please ask for the --- specify the request that you have
6 for improving the plan. But understand that if we go
7 down the path of the other --- that some of the
8 Intervenors have suggested, that it's fraught with risk
9 and it is out of the hands of this Commission and in the
10 hands of regulators. The Commission awaits the
11 Commission's --- the Companies await the Commission's
12 decision. Thank you very much.

13 CHAIR:

14 Thank you. Mr. Naum.

15 ATTORNEY NAUM:

16 Yes, thank you. Chairman Lane,
17 Commissioner Larrick in the public commentary this
18 morning, a comment was made that the Commission has to
19 make a judgment call. WVEUG submits that this is the
20 problem. We're here today because the Company simply
21 refused to make a decision. They wouldn't commit to a
22 decision or recommendation in the initial application
23 filing nor at the evidentiary hearing nor in briefs in
24 the application case. Instead, the Companies punted
25 everything to the Commission to make a judgment call on

1 their behalf, along with the implication that the
2 Commission, and not they, would be responsible for any
3 fallout.

4 The Commission acted, granted a
5 certificate and approved CRR and ELG investments at
6 Amos, Mountaineer and Mitchell. Now that Virginia and
7 Kentucky have disagreed, the Companies have again come
8 to the Commission, but not with any recommendation. Not
9 with a corporate decision that they have made and they
10 are now seeking approval to implement, but rather to
11 again punt the question and all consequences to the
12 Commission.

13 But it is their obligation, as
14 monopoly-service providers, to make a decision and
15 present a recommendation and a course of action that one
16 way or another undeniably impacts their customers and
17 the West Virginia public. It is not the Commission's
18 obligation or duty to make those decision for them or to
19 present outcomes or preauthorized consequences that are
20 not supported by any of these recommendations or
21 evidence.

22 It is not the Commission's role or
23 obligation to act as a super Board of Directors to tell
24 the Companies what to do or to give them reasonable
25 assurance. Regardless, if the Commission determines

1 that it will make up AEP's corporate mind on its behalf,
2 then WVEUG strongly opposes, in no uncertain terms, the
3 relief the Companies have requested now.

4 Of note, WVEUG submits that the
5 Companies have asked nothing of the Commission now that
6 the Commission has any regulatory obligation to do. As
7 noted in pleadings, which I will not recite here, WVEUG
8 also questions whether the legal authority exists to
9 provide the Companies' requested relief. The Commission
10 simply need not do anything that the Companies have
11 asked under West Virginia Law or its own rules and
12 regulations. The Companies have asked for relief in a
13 form of a ruling of what the Commission wants, an
14 acknowledgement, a commitment and an instruction. It's
15 not clear from any filing in this case what regulation
16 forms the basis for this requested relief.

17 The Commission need not, under
18 statutory rule or regulation, provide the Companies with
19 a ruling that it wants them to proceed with ELG
20 compliance costs at all three plants. The Commission
21 need not provide an acknowledgement that initial
22 investments to know what expenses of the plants,
23 whatever those might expansively be in the future, will
24 be the responsibility of West Virginia customers. And
25 WVEUG maintains that the Commission arguably does not

1 have the legal authority to do so. The Commission need
2 not provide any form of commitment that it will continue
3 to authorize recovery of such costs in the future. As
4 the Commission's aware, WVEUG maintains that this is not
5 possible under law.

6 Finally, the Commission need not
7 provide any form of instruction to the Companies to
8 propose a plan of any sort regarding the future of the
9 Mitchell plant. That is the Companies' obligation and
10 the Companies alone.

11 The Companies have received their
12 certificate, together with West Virginia jurisdictional
13 cost recovery, they can choose to proceed with that
14 certificate or they can choose to not do so and pursue
15 other options. Regardless of difficulties and risk,
16 difficulties and risk that the Companies always knew
17 they existed, even the interplay between three distinct
18 jurisdictions, those options remain available to them.

19 And regardless of AEP's claim that the
20 parties were aware of potential objections, the parties
21 have absolutely no reason whatsoever to suspect that the
22 West Virginia ratepayers might be imposed with Kentucky
23 and Virginia jurisdictional costs.

24 If AEP wants to explore the options
25 that it has loosely presented to the Commission, it is

1 absolutely free to do so. If the Companies want to fund
2 ELG costs of the three plants, that is up to them and
3 their shareholders. But there is no way this Commission
4 should predetermine or find the recovery of costs from
5 West Virginia customers is presumptively just and
6 reasonable, because they are not, and, therefore, cannot
7 be found at any point to be prudent.

8 The Companies' request in this case
9 amounts to just that request, however, and WVEUG submits
10 that it is improper. But regardless, the Companies
11 absolutely bear the full burden of proof, through the
12 presentation of complete evidence and the defense,
13 thereof, to demonstrate that their West Virginia
14 customers should be responsible for paying all of these
15 costs for all of their plants. You have no reasonable
16 means to say that this burden has been satisfied.

17 Until they can defend that position and
18 give a full due process opportunity for other parties to
19 evaluate and scrutinize those claims, if the Companies
20 believe that such ELG investments are prudent and
21 necessary, then they and their shareholders can and
22 should fairly, fully bear those costs. But by no means
23 should this Commission preemptively absolve the
24 Companies of their regulatory responsibilities and
25 obligations, particularly on the material questions that

1 at this point relies substantially on speculation of
2 what future costs might be or what future Commissions
3 might determine.

4 Likewise, if the Companies thinking is
5 prudent for Wheeling Power to acquire full ownership of
6 the Mitchell plant or take whatever other nebulous steps
7 may be necessary to, quote, recognize the changes needed
8 to deal with the issues resulting from any directive
9 from this Commission, end quote, as stated in their
10 petition, then the Companies are free to make an
11 application for Certificate of Convenience, seeking the
12 Commission's approval for that course of action.
13 Indeed, that is their only option under the Commission's
14 regulations. They do not need Commissioners to do a
15 prudency analysis that they are independently obligated
16 to do.

17 If pursued, that acquisition option
18 must necessarily involve the demonstration of sufficient
19 data to support that proposal and a proper proceeding
20 that includes having all parties to intervene, obtain
21 information through discovery, develop a full
22 evidentiary record through testimony and evidentiary
23 hearing, and an opportunity to brief all issues in full.

24 As I close, no matter how you cut this,
25 the issues presented by the Companies, or by AEP through

1 them, are issues and questions that the Companies must
2 resolve as part of their corporate responsibility.
3 These are not issues or questions that the Commission
4 must resolve on their behalf. To do otherwise is to
5 present very real risk and danger to AEP's West Virginia
6 customers and the entire West Virginia economy.

7 As was stated earlier today, AEP's West
8 Virginia rates have increased over a hundred percent in
9 the past ten years. The old narrative that West
10 Virginia has inexpensive energy rates is simply wrong.
11 And particularly for large industrial manufacturing
12 entities, it's becoming ever more difficult to do
13 business in this state, at the risk of tens of thousands
14 of jobs and hundreds of millions of dollars and tax
15 revenues and other critical contributions to the
16 economy.

17 It is and would be inherently unfair,
18 and WVEUG submits, contrary to law, to hoist upon West
19 Virginia ratepayers costs that are jurisdictional to
20 other states and to thereby provide benefits to those
21 states and AEP's ratepayers who reside there. For these
22 reasons and as expressed in greater detail in WVEUG's
23 response and reply filings, WVEUG urges the Commission
24 to deny the Companies' request.

25 CHAIR:

1 Okay, thank you. Sierra Club.

2 ATTORNEY BECHER:

3 Thank you, Your Honor. The Company
4 ended their --- their closing argument, or at least the
5 initial part of their closing argument talking about the
6 risk. But one risk is not addressed, and the risk is
7 real in this proceeding is the risk of West Virginia is
8 continuing to pay more and more costs to prop up three
9 increasingly uneconomic coal plants solely by
10 themselves, even though there is a jurisdictional share,
11 in fact minority jurisdictional share, of the Amos and
12 Mountaineer Plants in West Virginia and the Mitchell
13 plant is 50 percent owned by Kentucky.

14 Now, where in the record is the
15 evidence of these uneconomic plans, increasingly so?
16 It's precisely the capacity factors that I've discussed
17 with Mr. Short. These plants are all predicted to have
18 declining capacity factors in the future. And Mr. Short
19 recognized that. He admits that there were ---
20 cheaper electricity being produced elsewhere other than
21 from these plants. Despite that, the Companies are
22 asking West Virginia ratepayers to make a commitment not
23 just to run these plants for another seven years, but
24 they plan to run them for another 20 years, until 2040
25 or later.

1 That is a significant risk. And the
2 significant risk particularly is we do not yet know all
3 of the costs associated to that. There are potential
4 changes to the ELG rules themselves, which could require
5 more --- more extensive technology to be implemented.
6 There are potential hardware rules that we discussed in
7 the initial proceedings in this case that are coming
8 down the line and they could be quite expensive. In
9 fact, I think there was testimony that they could be in
10 the millions of dollars themselves for --- for something
11 such as carbon sequestration. And there are also the
12 ongoing operational maintenance costs and any other
13 environmental prudent costs down the road.

14 In this situation, the most prudent
15 option is to maintain as much flexibility as possible.
16 And the most flexibility possible is by ensuring the
17 NOPP and deferring as much of the expenses down the line
18 as --- as can be put.

19 I would also say, looking at the
20 Mitchell plant particularly, the cost-benefit analyses
21 for the Mitchell plant in the original proceedings
22 showed a \$27 million customer benefit when West
23 Virginians only paying for half of a share of the ELG
24 improvements at that plant. Now that calculus logically
25 has changed, because we're paying double what the cost-

1 benefit analysis in the original proceeding predicted it
2 to be.

3 That fundamentally should change the
4 decision point around the Mitchell plant. In the
5 best-case scenario, there was marginal benefit for the
6 Companies. The best-case scenario keeping the Mitchell
7 plant open, I think that was recited by Mr. Barron
8 something around \$2,000,000. Given the risk of keeping
9 that plant open and paying the ELG, it seems to make
10 certain sense to --- to have the Commission order to
11 have the Companies submit an NOPP for the Mitchell
12 plant.

13 Your Honor, I would close by saying,
14 I'm here representing the Sierra Club. And the Sierra
15 Club has a lot of environmentalist interests. There are
16 certainly a lot of environmental benefits as well to
17 shutting down these plants. But the decision on whether
18 or not to assign these costs than perhaps shut down the
19 plants is really a ratepayer issue.

20 It's a ratepayer issue that comes down
21 to the fundamental issue of fairness. Should West
22 Virginia ratepayers be subsidizing customers in Kentucky
23 and Virginia? That issue of fundamental fairness also
24 goes to costs, such as the savings cost that was briefed
25 by WVEUG, such as the Commission's authority to --- to

1 issue orders that would cause West Virginia ratepayers
2 to underwrite the Kentucky and Virginia customers. I
3 won't go into those arguments in detail, but I will say
4 Sierra Club adopts those --- those arguments as well.

5 In addition, this hearing, as Your
6 Honor knows, is on a very fast pace, and we also do
7 believe that there are significant due process issues
8 here. The Company talks a lot about the evidence in the
9 record and the anticipation that there might be contrary
10 rulings. But the cost-benefit analyses, the Mitchell
11 analysis in particular, were done with an assumption
12 that West Virginians would pay their jurisdictional
13 ownership share.

14 I think it is unfair to say that the
15 other party should have prepared some other benefit
16 analysis or should have anticipated for their
17 presentation of evidence something that the Companies
18 did not present in their own evidence, particularly when
19 it's the Companies that bear the burden of proof here
20 and the Companies are here in front of this Commission.

21 Thank you, Your Honor.

22 CHAIR:

23 Okay. Thank you. Coal Association.

24 ATTORNEY JACOB ALTMAYER:

25 Thank you, Chairman Lane. First off, I

1 want to mention quickly the question you had about
2 employment and tax revenue for various plants. It might
3 be addressed in Dr. Deskins' report that he submitted
4 last time. So there's another resource that you can go
5 to.

6 I'm going to just emphasize the issue
7 we faced in the beginning and appraise what is and
8 shouldn't be appraised concerning this Commission.
9 Before we had our hearings in June, we also had the
10 disasters in Texas and Oklahoma, the ongoing problems in
11 California. And now the world around us, we see U.S.
12 gas prices heading over \$5 per million Btu. I'm sure
13 you've all read in the paper about a disaster in London
14 and Western Europe when they lost wind power. And
15 because of the escalation in gas costs, it had actually
16 directed reactivation of coal plants. And they're now
17 wondering whether that can be achieved.

18 We had the opportunity to avoid those
19 risks, with or without contributions from Virginia and
20 Kentucky into these ELG improvements. Maintaining these
21 plants benefits all of West Virginia in many ways, the
22 crucial benefit it provides against the unreliability of
23 renewables demonstrated dramatically recently in the
24 news. The direct benefit to the workers and the
25 families of those workers at the plants and the mining

1 industry and supporting industry.

2 And the indirect benefits, of course,
3 income and severance tax revenues, locally and
4 statewide, benefitting our schools, roads, retirees, all
5 citizens of West Virginia. I suggest what's really
6 happening here in large part is we are seeing an example
7 of the war on coal. A war being waged by groups like
8 Earthjustice, substantially funded by Michael Bloomberg.

9 And you can look at their website to see that. The
10 Sierra Club, same issue.

11 I question the genuineness of the ENG
12 Group, who wants to break free from the tariffs and
13 negotiate directly. I don't know what disingenuous
14 purposes these entities may have. Maybe it's profit
15 from the carbon created, wasting more federal dollars,
16 subsidizing the renewable-energy systems, which are
17 proven unreliable. They're certainly not prepared to
18 shoulder the energy needs of our state and our country.

19 On August 4th this Commission properly
20 exercised its statutory duty in supporting a crucial
21 industry to West Virginia. The very near issue today is
22 whether the PSC should maintain that course. We support
23 AEP's application, we believe it's well-reasoned and
24 well-explained. We believe the shots taken by the
25 critics today are unfounded, as AEP acknowledged,

1 unlimited supply, the rate impacts of this will be
2 addressed, in future proceedings, in a different
3 economic environment, where we'll have greater clarity
4 as to gas costs and where that is.

5 And I know, Chairman Lane, you're
6 well-aware of this, but there's a probability of some
7 significant involvement, even economic support, to the
8 West Virginia Public Energy Authority, recently
9 reconstituted by Governor Justice, who has very broad
10 authority to become involved in the provision of utility
11 services, particularly when it supports our coal
12 industry.

13 So the Coal Association, for its part
14 on behalf of all West Virginians, respectfully urges
15 this Commission to stay through the course that you
16 began in your August 4 Order and resist the self-serving
17 distractions authored by these out-of-state groups.
18 Thank you.

19 CHAIR:

20 Consumer Advocate.

21 ATTORNEY WILLIAMS:

22 Your Honor, I'm not going to repeat all
23 the different arguments that have been asserted by the
24 West Virginia Energy Users Group and the other parties.
25 We have a different perspective. We are actually

1 representing West Virginia residents paying West
2 Virginia bills, paying West Virginia rates.

3 This is not just a request for
4 significant approval to go forward with a concept. It
5 is asking for preemptive rate treatment and preferential
6 treatment that is harmful to West Virginia customers.

7 But there is --- and I do have one
8 distinction and a difference with the significance of
9 the October 13, 2021 date. I would urge the Commission
10 to go through these carefully. And also the exhibits I
11 provided to you are documents provided by the EPA
12 itself, on the significance of those dates.

13 In 2015, they set forth a path on how
14 you're going to upgrade and have revisions to the
15 effluent limitation guidelines contained in your two
16 electricity generating point sources going forward. The
17 Company put itself on the path. It has filed NPDES
18 permits to be able to upgrade properly to be able to
19 continue operations not only in 2025, but in 2028 and
20 beyond, if needed. Once those upgrades are completed,
21 they don't need to do anything. They don't need to
22 change the course. They don't need to choose the
23 different path.

24 What the Company is asking you to do,
25 and what this rule did, is this provided three

1 alternative paths that they could jump off of the track
2 that they're on and go onto a different track. They
3 said on October 13, if you want to say you're shutting
4 down, you don't have to meet these standards. But you
5 still got to meet your permit standards, whatever your
6 permit requires.

7 Or if you're going to switch to low
8 utilization, lose maybe ten percent of your capacity,
9 we're now going to hold you to the old standards. You
10 can do something else there.

11 Or if you want to choose to go to a
12 higher standard than what is currently allowed and do
13 best practices, whatever they're going to be come 2028,
14 we'll let you choose that track. And you can decide
15 instead of meeting certain guidelines by 2025, we'll
16 give you 2028 to meet those enhanced standards.

17 The Company's already made their
18 choice. The Company has already filed applications.
19 It's already got an opinion. It doesn't need to do
20 anything on October 13th, just to be able to continue
21 the path they're on.

22 What they're asking for is special
23 rate-making treatment. They want to have their costs
24 paid upfront and they're not sure if they're going to be
25 able to recover from Kentucky or Virginia. They want a

1 hundred percent guarantee that West Virginia ratepayers
2 will pay the entire cost of all those upgrades, forever.
3 Without giving them any of the benefits other than
4 you're not going to shut it down.

5 What they're really doing is instead of
6 them making the decision to stay open, they're asking
7 West Virginia ratepayers to become investors in the
8 company without getting any rate of return, without
9 getting any ownership interests in the capacity, without
10 looking at how these ratemaking things will fall out.

11 If they're going to have West Virginia
12 ratepayers pay more than their fair share of costs and
13 expenses, West Virginia ratepayers ought to get
14 something back in return. They should be able to get
15 some blowback in terms of sales and capacity. They
16 should be able to get something else on the table. But
17 if you're guaranteeing the payment upfront before
18 anything else happens, they've got no incentive to
19 negotiate. Also they have no incentive to go back to
20 Virginia to make a good-faith effort to make Virginia
21 pay, while Virginia is making decisions, we'll pick up
22 the cost that West Virginia's already said on the record
23 it will pay.

24 You don't go into a bargaining table
25 giving up your --- all of your chips. You're willing to

1 have all the guarantees paid by the West Virginians,
2 carried by the West Virginia and they're using this
3 artificial guide --- that deadline for October 13th,
4 2021 to drive a decision by the Commission when it
5 should be a decision made by the Company.

6 If the Company wants to upgrade, there
7 doesn't have to look to you to be a super Board of
8 Directors. Do your job. Don't have the Commission make
9 the decision for you. Don't have them pad your pockets,
10 don't make West Virginia ratepayers pay a hundred
11 percent of the costs and put themselves further behind
12 competitively with all the surrounding states. Our
13 residential rates are already increasing much more than
14 our surrounding states. This will just make it worse.

15 I would urge the Commission, if you
16 want to support the idea of keeping the plants open, do
17 nothing. Let them go ahead and continue the course they
18 have. If they're essentially making a big old threat --
19 - because they're not making it clear on the record. If
20 they're making a big old threat, if we don't get a
21 hundred percent of the costs paid by West Virginia
22 ratepayers, we're closing three plants, we don't care
23 how much the damages cost. That's their choice. They
24 shouldn't box you in that position. That is placing you
25 in a position of duress and it's an unreasonable

1 decision to ask you.

2 CHAIR:

3 Thank you. Citizens Action Group.

4 ATTORNEY MURTHY:

5 Hi, Your Honor. My colleague, Shannon
6 Fisk, is going to deliver our argument. I would just
7 need his phone to be unmuted. He's calling in with the
8 215 area code.

9 OFF RECORD DISCUSSION

10 ATTORNEY BRASWELL:

11 Chairman, as a matter of principle and
12 based on our special duty to the Commission, Staff never
13 volunteers to go anywhere less than last. However, if
14 in the interest of time, if it's a benefit to the
15 Commission, Staff is willing to proceed with oral
16 argument before West Virginia CAG.

17 CHAIR:

18 You know, he can call in on this
19 number.

20 ATTORNEY FISK:

21 Can you all hear me on the video?

22 OFF RECORD DISCUSSION

23 ATTORNEY FISK:

24 Hello, can you hear me now?

25 CHAIR:

1 Okay, go ahead and proceed.

2 ATTORNEY FISK:

3 Thank you, Your Honor. So the Company
4 here is seeking authorization to require West Virginia
5 customers to pay a hundred percent of the costs, and the
6 Companies do not owe or they do not serve West Virginia
7 customers. West Virginia Citizens Action Group is in
8 favor, Energy Efficient West Virginia, are strongly
9 opposed to the proposal because of the huge impacts it
10 may have on our West Virginia customers.

11 While such a request that the Company
12 filed is extraordinary, what is most striking to see all
13 of its entire assets and all the analytical support not
14 be provided for the request. Instead, a hearing --- the
15 Company continues to report uncertainty about the
16 ability of the Company to use the delegated plan for
17 completion process by the time, somehow justifies
18 accident approval without providing the parties due
19 process to reevaluate and address that proposal.

20 It does not adopt in its record
21 regarding the Companies proposal for a conclusion that
22 is somehow lawful, unjust, or reasonable. But we don't
23 have certainty around the company proposal and the
24 impacts it'd have on the West Virginia Customers. For
25 example, the hearing did not indicate the face that the

1 Company had not identified the difference how much West
2 Virginia customers would pay to be held to this, much
3 less unquantified, quote, additional investment for ONM
4 expenses needed to keep those plants operating past 2028
5 to West Virginia customers which would be held
6 responsible for. The companies have not identified in
7 the analysis on the amount of impact to West Virginia
8 customers in this proposal, but in regard the ownership
9 allocation fee for the ultimate approval of APCo.

10 No parties have identified any
11 legal basis for charging West Virginia customers to
12 retrofit generation capacity that is not owned by the
13 Company and or does not provide service to them. And
14 any of the approval of these proposals is unlawful. The
15 Company request --- the Companies would require people
16 to operate different regulator or the, potentially for
17 --- for ownership changes and the cost increases. It
18 would result in a proposal and that if they don't get
19 approval the approval they can that West Virginia
20 customers would be provided that fee --- account every
21 customer even past 2028. There's not been an identified
22 date of the capacity the Companies are planning on
23 acquiring power under their proposal, decreased
24 allocation from Amos and Mountaineer to Appalachian
25 Power Company's West Virginia customers while even more

1 capacity is used or replaced in 2028 and 50 percent
2 shared of the Mitchell Power Plant and the --- the
3 companies have allocated in their original application.
4 In addition, it's not specified why these plans for the
5 Mitchell Power Plant on October 13th for these plants to
6 retire in 2022 to '25, and --- to 2028 if the Commission
7 declines this plan.

8 To review the plans, there is simply no
9 lawful and legal basis of how they should include the
10 170,000 West Virginia rate payers or the cost that would
11 be paid by the West Virginia customer. And even if they
12 uphold the Virginia and Kentucky Commissions plans a
13 portion of Mitchell and Mountaineer to serve their
14 customers ---. There is currently no evaluation on
15 whether more than 5,000 megawatts capacity is enough to
16 provide --- to the possibility to West Virginia
17 customers all the capacity action ---.

18 In closing, it is important to know
19 that today the Companies witnesses were unable or
20 unwilling to say definitely if the Companies proposal is
21 going to benefit the West Virginia customers. Here as a
22 part of this proceeding CAD and WVEUG are also opposed
23 and also state in opposition to --- to this proposal and
24 that Sierra Club West Virginia based or implications
25 they might have. And in addition, we've heard that more

1 over in the public hearing testimony from West Virginia
2 customers who pay bills, and even citizens are concerned
3 about needing to pay even more for this.

4 Having the hearing Your Honor if you
5 can increase the average monthly bill over the past five
6 years --- 15 years, and the job losses and economic
7 challenges accompanying that, the increase is the last
8 thing West Virginia customers need is to have to start
9 paying on behalf of the paying customers that we urge
10 the Commission to reject a rate proposal that's lawful,
11 unjust, and unreasonable. Thank you, Your Honor.

12 CHAIR:

13 Okay. Thank you. Ms. Braswell.

14 ATTORNEY BRASWELL:

15 Thank you, Chairman and Commissioner.
16 Our records are clear in this case that the Companies do
17 not need to do anything additional with West Virginia
18 DEP in order to construct the projects that were
19 certificated earlier in this case. The law is equally
20 clear that the Companies have a duty to serve their
21 customers. There is no showing in the records that the
22 case cannot be held in advance while APCo seeks ELG cost
23 recovery in Virginia. There's no evidence in the record
24 that the Companies will cease to construct the project
25 if this petition is not granted at this time or held in

1 abeyance while they seek cost recovery in Virginia.

2 There's no showing that this petition
3 needs to be granted at this time. If however the
4 Commission, in its examination of the record, the
5 evidence and the law, comes to the conclusion that the
6 Petition should be granted, Staff asks the Commission to
7 require conditions of the Companies consistent with the
8 evidence in this case of its own regulatory policy.

9 The issues of cost recovery in multiple
10 jurisdictions in this case remind me of the children's
11 story of the little hen who plants the grain seeds by
12 herself, who tends the grain by herself, who harvests
13 the grain by herself, has the grain milled by herself,
14 and bakes the bread by herself. She is then asked to
15 share the bread with others who have not contributed to
16 the baking of the bread.

17 For those reasons, Staff believes it's
18 appropriate for the Commission, if it grants this
19 Petition, to require the Companies to seek ELG cost
20 recovery in Virginia after September 1st, 2021 ---
21 sorry, September 23rd, 2021, and as soon as possible
22 thereafter.

23 The Commission has previously
24 considered the issue of denial of costs of a generating
25 asset in Virginia while the matter remains pending

1 before West Virginia. In its final Order entered in
2 Case
3 17-0894, entered May 30th, 2018, where the Commission
4 stated on page seven, thus even if this Commission found
5 that the Companies' Petition should be granted, the
6 acquisition of the wind facilities could not occur
7 without further proceedings in West Virginia to firm up
8 allocation, and probably in Virginia, to address
9 treating facilities as nonjurisdictional to that state.

10 Therefore, if the ELG cost recovery is
11 again denied in Virginia, the Company should be directed
12 to seek determination from the Virginia Commission that
13 the output and capacity of the plant are
14 nonjurisdictional to that state after December 31st,
15 2021.

16 Staff requests that the Commission
17 would require a condition that the Companies, but
18 Wheeling specifically, should obtain from the Kentucky
19 Public Service Commission a determination of whether a
20 CPCN is needed from the Kentucky Commission to construct
21 the ELG project at the Mitchell plant that includes the
22 50 percent undivided ownership of Kentucky Power.
23 Basically, it cannot construct something at my
24 neighbor's house, even if I pay for it.

25 For --- the Staff would ask the

1 Commission as a condition of granting the Petition that
2 the Commission instruct Wheeling Power that any
3 negotiations to purchase Kentucky Power's share of the
4 Mitchell plant should exclude the Conner Run Impoundment
5 for all the Commission sound reasons stated in its
6 Orders in Case 14-0546, which was the case addressing
7 the acquisition of the Mitchell plant.

8 Finally Staff would request that the
9 Commission deny the request to double the covered
10 routine O & M expenses related to the Amos and
11 Mountaineer plants that are already being recovered in
12 rates from Virginia ratepayers and protect the little
13 West Virginia red hen from --- from unfair treatment of
14 her bread. Thank you for your time, and thank you for
15 an opportunity for the closing argument.

16 CHAIR:

17 Thank you. Should I say that that
18 story about the little red hen was always my favorite
19 childhood story? Mr. Bacha.

20 ATTORNEY BACHA:

21 Thank you, Your Honor. I must confess,
22 perhaps because my kids are little, I don't recall that
23 story.

24 I'd like to start by just saying that
25 much of what has been brought up in the other parts of

1 oral argument is addressed either in the Companies'
2 testimony or in --- in its reply or in Cross Examination
3 of witnesses today. And I'd ask the Commission to look
4 at that.

5 In addition, I think much of it has
6 already been addressed in the Commission' August 4th
7 Decision, where the Commission took into account all of
8 these things and made its determination. There are a
9 few things that I do think is appropriate to --- to
10 point out. I think for the first time I'm now hearing
11 that folks are recommending that the Commission do
12 absolutely nothing prior to October 13th. That
13 certainly is the Commission's prerogative, and contrary
14 to what was stated, there's no threat from the Companies
15 about what happens if the Commission decides to take
16 that route.

17 But to be sure, that that is telling
18 management what this Commission thinks about these three
19 plants and whether or not they ought to be ---
20 investments ought to be made in them to allow them to
21 continue to operate beyond 2028.

22 Hearing nothing and having the two
23 Orders of the Kentucky and the Virginia Commission, I
24 think will speak loudly to management and will, in many
25 respects, dictate what proposed actions that the

1 Companies will take. I can't speak for management, but
2 it certainly will be one of those considerations that
3 they take into account.

4 As everyone said, there's other
5 considerations, but it has to be ---. I --- I
6 understand now that for the first time that the Staff
7 seems to be contesting that you do nothing either. And
8 if they --- if the alternative is if they --- if the
9 Commission were to grant the requested relief that the
10 Company requested in its petition and opening, that
11 certain conditions be placed on the Companies.

12 I could not write them down fast
13 enough, Your Honor, and that's probably because I'm a
14 slow writer. But again, that --- that's a prerogative
15 of the Commission, but it will also be something that
16 the Companies will need to take into effect --- into
17 account as they make the decision on October 13th.

18 I didn't hear anyone say that October
19 13th isn't an important date. What I heard them say is
20 you don't have to make a decision, which is respectively
21 you know if you don't issue an NOPP to permit the
22 Company to the CCR and ELG investment at all three
23 plants, regardless of what was said by Kentucky and
24 Virginia to this point ---.

25 One of the things I didn't hear from

1 anyone else was something that I think the Commission
2 gave careful consideration to in its Order, and that's
3 the cost of the replacement power. That's one of the
4 things the Commission has to balance is the cost of ---
5 of making these investments and indicating that West
6 Virginia customers will bear the ELG expenses, because
7 the plants had the opportunity to operate beyond 2028.
8 And the option, of course, is if they do retire, there
9 will be extensive costs to replace those units.

10 Another thing I heard was that the
11 evidence shows that they're uneconomic. I think what
12 the Commission's Order determined was there are various
13 reasons that they --- that the Commission believes that
14 it is to the benefit of West Virginia's economy to keep
15 these plants open. So they ought to be weighed --- the
16 Commission already weighed that argument, and in my
17 opinion rejected it.

18 I also heard arguments about a
19 subsidization, even though it was short, an extensive
20 Cross Examination, repeatedly indicated that there's
21 really no cost subsidization, because the ELG investment
22 is to allow the plants --- again, I'm repeating myself
23 --- to operate beyond 2028 with --- in order to benefit
24 the West Virginia customer.

25 I wish I had a child's story to end

1 this, Your Honor, but I don't. And again I'd just
2 reiterate the Company's request in this proceeding.
3 Thank you.

4 CHAIR:

5 Well, I didn't mean to give the
6 impression that I agreed with her interpretation of the
7 children's story. It was just always one of my
8 favorites because the little red hen did all of the work
9 and, therefore, she got all of the benefits in the end.

10 So that brings us to the end. And the
11 transcript will be ready in seven days. And we will
12 take this matter under advisement. And rest assured
13 that we will have a decision done by October 13th. And
14 with that, I thank you all for your attention. And for
15 those of you who have a long ways to go, please drive
16 safely.

17 * * * * *

18 HEARING CONCLUDED AT 6:11 P.M.

19 * * * * *

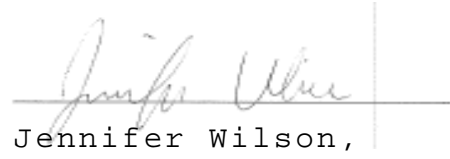
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CERTIFICATE

I hereby certify, as the stenographic reporter,
that the foregoing proceedings were taken
stenographically by me, and thereafter reduced to
typewriting by me or under my direction; and that this
transcript is a true and accurate record to the best of
my ability.

Dated the 1 day of October, 2021



Jennifer Wilson,
Court Reporter

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E X H I B I T S

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ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: acb@ramlaw.com

September 20, 2021

BY ELECTRONIC FILING

Connie Graley, Executive Secretary
Public Service Commission
of West Virginia
201 Brooks Street
Charleston, WV 25301

Re: Appalachian Power Company
and Wheeling Power Company
Case No. 20-1040-E-CN

Dear Ms. Graley:

Please find attached herewith, the **Reply of Appalachian Power Company and Wheeling Power Company**. Please file the attached as appropriate in the above-referenced case. Please note that Exhibit A should be scanned in color for the Commission's electronic docket.

Thank you for your assistance in this matter. If you have any questions, please do not hesitate to contact me.

Very truly yours,

Anne C. Blankenship
(W.Va. State Bar #9044)

Counsel for Appalachian Power Company
and Wheeling Power Company

ACB
cc: service list

Charleston, WV | Clarksburg, WV | Wheeling, WV | Alliance, OH

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{R1616065.1}



**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a
Certificate of Public Convenience and
Necessity for internal modifications at
coal fired generating plants necessary
to comply with federal environmental
regulations.*

**REPLY OF APPALACHIAN POWER COMPANY
AND WHEELING POWER COMPANY**

COME NOW Appalachian Power Company (“APCo”) and Wheeling Power Company (“WPCo”) (jointly “the Companies”), in accordance with the procedural schedule set forth by the West Virginia Public Service Commission (“Commission”), and submit this Reply in support of their “Petition to Reopen Case and to Take Further Action.” The Companies hereby reply to the responses filed in opposition to their Petition to Reopen by intervenors West Virginia Energy Users Group (“WVEUG”), Consumer Advocate Division (“CAD”), Sierra Club, and West Virginia Citizens Action Group, Solar United Neighbors, and Energy Efficient West Virginia (“CAG/SUN/EEWV”) (sometimes collectively referred to herein as “Intervenors”).¹ As explained herein, the Companies seek the guidance of the Commission under unique, pressing circumstances, given its August 4, 2021 Order, while the Intervenors downplay the urgency of this matter and

¹ Additional intervenors in this matter include the West Virginia Coal Association, Inc. (“WVCA”) and the Attorney General for the State of West Virginia. The WVCA filed a response in support of the Companies’ Petition to Reopen, which is referenced herein but is not being replied to. The West Virginia Attorney General did not file a response to the Companies’ Petition to Reopen, nor did the Commission’s Staff.

lobby for a course of action that is fraught with uncertainty and significant risk and is inconsistent with the Commission's Order. In support of their Reply, the Companies state as follows:

A. The Intervenors Fail to Address the Pitfalls of Filing a Notice of Planned Participation Committing to Retire and then Trying to Reverse Course.

The Companies have addressed the importance of the October 13, 2021 deadline multiple times in this proceeding: in their initial Application filed in this matter, at hearing and in post-hearing briefing, in their Petition to Reopen, and in the pre-filed testimony submitted with those filings. In an attempt to avoid that deadline, the Intervenors propose a course of action that would have the Companies declare a retirement now and then rely upon a series of unsure events and unproven technology to reverse course sometime in the future to be able to run the subject plants past 2028. There is simply no practical ability for the Companies to do what the Intervenors propose, as discussed below.

To summarize the environmental rules at issue, the Steam Electric Effluent Limitations Guideline ("ELG") rule (not finalized until October 2020) establishes discharge limits that must be achieved "as soon as possible" or, alternatively, permits an affected facility to give notice by October 13, 2021 of its intent to pursue the rule's alternative compliance paths, one of which requires a commitment to retire by end of 2028.² The other rule at issue in this matter, the Coal Combustion Residuals ("CCR") rule (not finalized until August 2020), also requires compliance work related to the same waste streams in order for an affected facility to continue operating.

The CCR rule required the Companies to stop using their coal ash ponds by April 11, 2021. The United States Environmental Protection Agency ("EPA") has tolled that compliance date for companies that have submitted extension requests. Because the Companies have no alternative

² The rule alternatively requires a plant to refuel by the end of 2028, but in light of the record of this case and for the sake of brevity, the Companies will simply use the term "retire."

means of handling coal ash wastewater and needed time to develop an alternative, on November 30, 2020, they submitted an extension request with their plan to complete CCR and ELG compliance work at all three plants “as soon as possible.” The EPA has not yet provided a response to the Companies’ extension request (or to any other company that submitted such a request). The Companies’ plan includes converting wet bottom ash handling systems to dry bottom ash handling and closing the coal ash ponds to comply with the CCR rule. This pond closure and dry bottom ash conversion plan also meets a substantial portion of the ELG rule requirements. Filing a Notice of Planned Participation (“NOPP”) by October 13, 2021, as the Intervenors propose, committing to retire all three plants by 2028 in lieu of converting to dry bottom ash handling and installing ELG treatment systems, would be a significant departure from the Companies’ submitted plan and could jeopardize the plants’ ability to comply with CCR, which in turn could require the Companies to stop operating the plants until they could come into compliance, or may even force an earlier retirement.

Although the Commission has approved ELG compliance work at all three plants and cost recovery of West Virginia’s jurisdictional share, there is an inherent conflict among the recent decisions from Kentucky, Virginia, and West Virginia and a resulting uncertainty as to whether the Companies could recover the full, necessary costs of performing that work. It is for that reason the Companies ask the Commission for guidance in their Petition to Reopen. As the Companies have explained, the fast approaching October 13, 2021 deadline is a proverbial fork in the road.

The Intervenors, however, downplay the significance of the October 13, 2021 deadline to the point of calling the urgency of this matter “illusory” and “false.” Sierra Club Response at 5; CAG/SUN/EEWV Response at 6. Despite the Commission’s Order approving ELG work at all three plants, which would allow them to operate past 2028, several Intervenors posit in their

responses (and the others appear to agree) that the best course of action would be for the Companies to file a NOPP with the West Virginia Department of Environmental Protection (“WVDEP”), by October 13, 2021, stating just the opposite, that the Companies plan to retire all three plants by end of 2028. Then, these Intervenor argue, the Companies should obtain extensions of the ELG compliance dates that are in their National Pollutant Discharge Elimination System (“NPDES”) permits, and at some time prior to December 31, 2025, the Companies should withdraw the NOPP for any unit they do not wish to retire. *See, e.g.*, CAG/SUN/EEWV Response at 3-5. Additionally, the timeline proposed as necessary to meet the “as soon as possible” CCR rule compliance dates would have to be amended by the Companies and approved by the EPA. Intervenor misleadingly imply that taking all these actions and receiving all requisite approvals is a simple and guaranteed undertaking; it is not.

The Intervenor’s proposal hinges upon unknown outcomes before federal and state environmental agencies and is fraught with risks and uncertainty. First, the WVDEP is not required to grant the Companies an extension of the current NPDES compliance dates, as explained by Mr. Spitznogle.³ And the EPA is not required to allow changes to the Companies’ CCR plans, even if WVDEP approves an extension of ELG compliance dates in the NPDES permit. Certain of the Intervenor, in their short-sighted proposal, simply assume that WVDEP will grant extensions of the ELG deadlines to facilitate the delay they propose. They also do not account for the very real possibility that interested parties (perhaps including themselves) would challenge

³ “The Companies could ask WVDEP to amend the NPDES permit to extend the ELG compliance date and to allow a retiring plant to operate through the last possible ELG compliance date of December 31, 2025, but the WVDEP is not required to agree to such a modification.” Spitznogle supplemental direct testimony at 4 (emphasis added). By way of explanation, the Companies note that the WVDEP issues and can amend the NPDES permit, which contains the ELG compliance deadlines. But every permit proposed for issuance can be vetoed by the EPA, and the EPA controls the approval needed under the CCR program.

such requests for extension. Furthermore, there is a very real possibility that the EPA would veto an extension of the ELG deadlines because, as noted previously, the ELG rule requires compliance “as soon as possible,” and the ELG deadlines contained in the current versions of the WVDEP permits are the soonest possible compliance dates.

Second, if anything is illusory, it is the Intervenor’s portrayal of both the implications of submitting a NOPP and the relationship between the construction timelines required to implement the necessary CCR and ELG controls (submitted with the Companies’ Application as exhibits to Company witness Brian Sherrick’s direct testimony) and the compliance dates in the WVDEP permits for the plants. The earliest of the proposed ELG compliance dates is May 31, 2022, which is the deadline for the Mountaineer plant to meet the bottom ash transport water (“BATW”) limits of the ELG rule. That is a mere 8 months from now. There is simply no practical ability for the Companies to do what the Intervenor propose - file a NOPP indicating they will retire by end of 2028, get an extension (which is not guaranteed), and then withdraw the NOPP after a lengthy hearing in this matter. The Companies need to continue the work that has already begun in order to meet the fast-approaching ELG compliance dates, the earliest of which is in May 2022.

Sierra Club incorrectly asserts that a company that submits and then withdraws a NOPP gains “significant advantages” because it then has “until December 31, 2028 to meet its ELG limits.... Delaying compliance until 2028, would allow the Companies and the Commission to better understand and evaluate the limits that will be applicable....” Sierra Club Response at 5-6. Withdrawing the NOPP would require participation in the voluntary incentives program (“VIP”), which imposes more stringent limits but has a 2028 compliance date for flue gas desulfurization (“FGD”) wastewater only; the Companies would still have to meet the current BATW limits by the earlier BATW compliance dates. Sierra Club glosses over that crucial point, as well as the fact

that the membrane technology necessary to meet VIP limits is unproven at utility scale or under coal power plant conditions. In fact, there exist today only pilot scale demonstrations of the technology in the US and no commercial operating data to provide assurances it can perform reliably or achieve removal levels required in the VIP.

Furthermore, given the integrated nature of the CCR and ELG projects, the Companies cannot simply perform CCR work and leave ELG in limbo. The compliance plan and accompanying extension request that is pending before EPA, and that allows the plants to continue to operate, requires the plants to install dry bottom ash handling and to close the existing ash ponds as a means of complying with both CCR and ELG. If the ELG component is taken out of the equation, the plan for CCR compliance no longer works and the Companies would need to submit a different plan to EPA for approval – which is not guaranteed to be granted and, even if granted, is subject to challenge. If the revised plan is not approved by EPA, the plant may have to be idled until the CCR compliant pond is completed.

Lastly, the Intervenor's proposal that the Companies commit to retire plants, and then immediately work towards reversing that course, undermines the EPA's procedural directives and instantly runs counter to the Commission's August 4, 2021 Order. Surely the EPA did not expect, and cannot be expected to condone, such gaming of their own rules. To explain, EPA could not have intended for companies to file a NOPP exercising an option to retire simply as a way to delay compliance and attain additional optionality. This is supported by the fact that the ELG Rule requires a company that submits a NOPP to also submit supporting information such as integrated resource plans or other documentation demonstrating a commitment to retire, and annual reports demonstrating progress towards compliance milestones, thus indicating that the company is actually pursuing the compliance option in question. 40 CFR 423.19(f)(2)-(4). Additionally, EPA

has stated that a company that opts into one of the alternative compliance paths through the submission of a NOPP and then, due to a change in circumstances, transfers into one of the other alternative compliance paths, should not be able to “circumvent otherwise applicable deadlines” by doing so.⁴ Yet that is exactly what Intervenors suggest the Companies should do—file a NOPP committing to retire, and then withdraw that NOPP and seek to establish ELG compliance dates later than those that the Companies and WVDEP have already determined are “as soon as possible.” The ELG deadlines cannot be circumvented as easily or as assuredly as Intervenors suggest.

To recap, the Intervenors’ proposal – filing and then withdrawing a NOPP – requires the Companies to navigate a gauntlet of environmental regulatory hurdles, as summarized below, most of which have no precedent under the CCR and ELG rules that were only finalized last year.

Filing the NOPP requires the Companies to amend their pending CCR extension requests to change the CCR compliance option from dry bottom ash conversion and pond closure to construction of a new CCR compliant pond. Doing so carries the following risks:

- The CCR rule’s April 11, 2021 deadline to close noncompliant ash ponds is tolled pending EPA approval of the pending CCR rule extension request. Changing the request at this late date jeopardizes the protection of this tolling provision, which in turn jeopardizes the Companies’ ability to continue to operate the plants until a CCR compliant pond can be constructed.
- Under the CCR rule’s provisions for seeking an extension of the April 11, 2021 date, construction of the proposed compliance solution must occur “as soon as possible”; any change to the proposed plan for compliance that changes the proposed

⁴ In the ELG Preamble, EPA noted: “a plant seeking to transfer between the ELG rule provisions must demonstrate compliance with all requirements of both the provision transferred from and the provision transferred to, and continue to meet requirements that were applicable if that applicability date has passed. This ensures that a plant does not miss or circumvent otherwise applicable deadlines or cease operating equipment already installed, operated, and maintained to comply with deadlines that have passed” 85 FR 64650, 64708 (Oct. 13, 2020) (emphasis added).

timeline for compliance increases the risk of disapproval by EPA or challenge by interested parties.

Filing the NOPP and later withdrawing it requires the Companies to amend their NPDES permits and to request that WVDEP extend their BATW compliance dates. Withdrawing a NOPP carries these additional risks:

- WVDEP may decline to extend BATW compliance dates, as it has already determined that the 2022/2023 dates in existing or proposed permits represent the “as soon as possible” compliance deadline.
- Even if WVDEP agrees to extend the BATW compliance dates, those dates can only be extended through December 31, 2025 at the latest.
 - Assuming WVDEP extends the BATW compliance dates for a plant, depending on when that final permit is issued, the Companies may need to idle the plant during construction to install the ELG compliance technologies. For example, a permit that is issued in late 2025 will require that the plant be idled through much of 2026, at a minimum, to allow for the installation of dry bottom ash handling.
- If WVDEP agrees to extend the BATW compliance dates, EPA may veto an extension of the deadlines because the ELG rule requires compliance “as soon as possible” and the ELG deadlines in the current versions of the WVDEP permits are the soonest possible compliance dates.
- If WVDEP agrees to extend the BATW compliance dates, that decision will be subject to appeal by interested parties, and the outcome of any such appeal would be uncertain.
- Withdrawing a NOPP requires participation in the VIP for FGD wastewater; this technology has not been proven in this context and may not provide sufficient pollution control to meet the more stringent ELG limits under the VIP.

To the extent the Intervenor’s proposal is even available to the Companies, it is certainly fraught with risks and uncertainties. To assist the Commission in understanding the true “fork in the road” that the October 13, 2021 deadline is, the Companies include herewith, as Exhibit A, a flow chart illustrating the complexities and pitfalls of the Intervenor’s proposal. The Companies’ witness, Gary Spitznogle, will be available at the September 24, 2021 hearing for questioning regarding these issues and the exhibit. The Companies urge the Commission not to view this

matter in a vacuum, as Intervenors have, and ask the Commission to recognize that there truly is an urgency and need for the guidance requested by the Companies.

B. The Intervenors' Due Process Arguments Ignore the Pressing, Exigent Circumstances of this Matter and the Well-Developed Record Already Before the Commission.

The Intervenors complain that the Commission granting the Companies' requested relief would deprive them of due process. It is important to recognize exactly what is being requested by the Companies and how it relates to the Order already provided. The Companies request the following:

1. A ruling from the Commission that it wants the Companies to proceed with the ELG projects at all three plants, including on KPCo's undivided 50% interest in the Mitchell plant, notwithstanding the new cost estimates, or if not at all plants, then on which plants or units;
2. An acknowledgement from the Commission that additional investments and O&M expenses at the plants will be needed prior to 2028, and will be the responsibility of West Virginia customers, if the plants are to operate beyond 2028;
3. A commitment from the Commission that it will continue to authorize recovery of the costs described in items 1 and 2 above, so long as they are reasonable and prudently incurred, once the Companies incur such costs at the Commission's direction; and
4. Instruction from the Commission that WPCo propose a plan in a future docket that recognizes the changes needed to deal with the issues resulting from any directive from this Commission to perform the ELG work at Mitchell.

Petition to Reopen at 5. The Companies are seeking only a level of assurance that allows them to make a decision by October 13, 2021 regarding the integrated CCR and ELG work at the three plants. The requested relief, itself, highlights the fluid nature of the situation; not to mention, the possibility of the Virginia State Corporation Commission approving ELG investments in a later proceeding. The Companies are seeking guidance from the Commission in light of the inherent

conflict among the Kentucky, Virginia, and West Virginia decisions; they are not trying to pull the rug out from underneath the Intervenors.

The Intervenors' arguments that this matter should not proceed on the current schedule wholly ignores the exigent circumstances described above and the information already contained in the extensively litigated record of this case. The Companies do not seek to deny the parties an opportunity to be heard. The path the Companies seek is an attempt to recognize their opportunity for input within the available timing. This is achieved by reopening this case with its developed record on many of the same issues and the addition of further testimony for the consideration of the Commission and other parties.

Just as the CCR/ELG compliance options described above should not be viewed in a vacuum, neither should due process. *See Morrissey v. Brewer*, 408 U.S. 471, 481, 92 S.Ct. 2593, 2600, 33 L.Ed.2d 484 (1972) (“[D]ue process is flexible and calls for such procedural protections as the particular situation demands.”); *Cafeteria Workers v. McElroy*, 367 U.S. 886, 895, 81 S.Ct. 1743, 1748, 6 L.Ed.2d 1230 (1961) (“‘Due process,’ unlike some legal rules, is not a technical conception with a fixed content unrelated to time, place and circumstances.”). The Commission recognized the possibility of “changes in ownership or allocation of costs and output of any of the three Plants” and that “the Companies should present the nature and effect of such changes to the Commission in an appropriate proceeding.” Aug. 4, 2021 Order at 18. None of the Intervenors appealed, sought reconsideration, or otherwise objected to the Commission’s directive/invitation.

As the Intervenors make clear in their responses, they know full well the costs of performing CCR and ELG modifications at all three plants. And they cannot deny the impact of the conflicting decisions and the imminence of the October 13, 2021 deadline. The Companies’ Supplemental Direct Testimony submitted with their Petition to Reopen did not present any novel

information meant to surprise or catch the other parties off guard, it was a continuation of the same issues with salient updates that impacted the outcome after the hearing in this matter was complete.

The argument that the reopening of this case is too far removed from the content of the proceedings belies the record. Not only did the Companies address the importance of the October 13, 2021 NOPP deadline as discussed above, Mr. Spitznogle was cross-examined on the subject extensively during the evidentiary hearing. *See* June 8, 2021 Tr. at 88-90, 106-107. The Intervenors have presented lengthy legal arguments in their responses that West Virginia customers should not be responsible for 100% of ELG costs and will have the benefit of an evidentiary hearing to further develop and present those arguments to the Commission. The Companies have asked for guidance in their Petition to Reopen, not for a new surcharge to be effective immediately; the rate impacts can be addressed in a future proceeding. To say the Petition to Reopen should be denied on procedural grounds not only ignores the pressing, exigent circumstances of this matter, but elevates form over substance.⁵ The deadlines discussed herein are real and the Companies need to act expeditiously if the Commission wishes for them to preserve the option to run the plants past 2028. These are the facts that confront the parties and this docket is the opportunity to provide input and continue the discussion on the central matter at issue.

The scope of the Companies' request is a continuation of the issues at the heart of this case. The Commission should recognize the scope of the requested relief and the impending deadlines to determine the proper due process. The Petition to Reopen should not be dismissed outright just

⁵ The Intervenors also cite to the Companies' own recent due process arguments in Case No. 21-0339-E-ENEC. That case is distinguishable, however, because the challenged "evidence" in the ENEC case was truly not known to the parties prior to the hearing, there was no further hearing scheduled to consider it, and it was relied upon solely for some of the Commission's conclusions without any challenge by brief or otherwise.

so more written discovery can be conducted in an already well-developed case, especially not when the parties are being afforded an evidentiary hearing on said petition.

C. The Intervenors Ignore the Various Interests that the Commission Must Weigh in Rendering its Decisions.

The Commission noted in its Order granting the Companies' Application that it is "charged with the responsibility for appraising and balancing the interests of current and future utility service customers, the general interests of the state's economy and the interests of the utilities subject to its jurisdiction in its deliberations and decisions." W. Va. Code § 24-1-1(b). The Commission further noted that, when weighing these interests, it must "[p]rovide the availability of adequate, economical and reliable utility services throughout the state" and "[e]ncourage the well-planned development of utility resources in a manner consistent with state needs and in ways consistent with the productive use of the state's energy resources, such as coal" among other considerations. W. Va. Code § 24-1-1(a)(2) and (3). Based on the "extensive record" before it, the Commission found "that the upgrades at all three power Plants are prudent, cost effective, and in the best interest of the current and future utility customers, the State's economy, and the interests of the Companies." Aug. 4, 2021 Order at 18.

The Intervenors have lost sight of the forest for the trees in accusing the Companies of trying to foist unjust and unreasonable rates on their customers. It should not be ignored that the Commission already balanced the appropriate interests and granted the Companies' application for both CCR and ELG work at all three plants. But the Intervenors pay no attention to the economic benefits outlined by the Commission of the continued operation of the plants to the local

and state economies or to the loss of capacity in the event of retirement.⁶ Certain of them have made clear they want the Companies to commit to retiring the plants in 2028, communicating that commitment by October 13, 2021, and possibly later reversing that commitment. The Companies have acknowledged the fact that operating the plants past 2028, consistent with the Commission's Order and in light of the orders of Virginia and Kentucky, will require that ELG costs and other incremental costs be allocated to West Virginia customers 100 percent (at least at the present time), which would inevitably cause an increase in rates. To effectuate the direction and optionality sought by the Commission, action is needed. Using the existing docket is the best manner to recognize the direction provided by the Commission; therefore, the Companies ask the Commission whether, under the current circumstances, it still stands by that direction given in its August 4, 2021 Order and its attendant consequences, or whether it wishes to instruct the Companies to follow a different course. This is not an unjust or unreasonable request.

CONCLUSION

WHEREFORE, for the reasons stated herein and in their Petition to Reopen, the Companies respectfully request that the Commission grant their requested relief.

Respectfully submitted,

**APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY**

By Counsel



William C. Porth (*WV State Bar #2943*)
Anne C. Blankenship (*WV State Bar #9044*)
Jonathon C. Stanley (*WV State Bar #13470*)

⁶ In contrast, the WVCA, in its response, acknowledged the various benefits afforded by continuing to operate the plants and the "very urgent time constraints imposed on the Companies by federal regulations" that are driving their request for relief. WVCA Response at 2-4.

ROBINSON & McELWEE PLLC
P. O. Box 1791
Charleston, West Virginia 25326

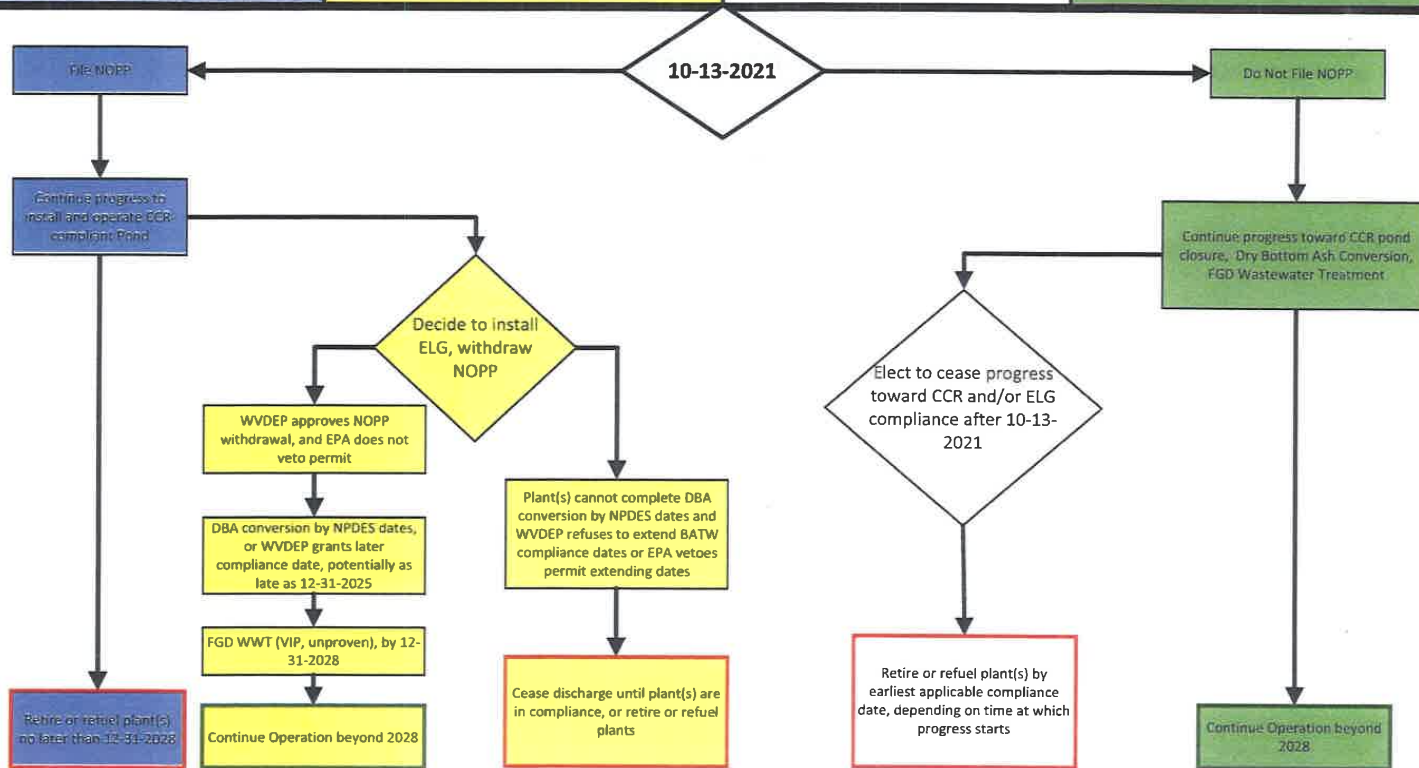
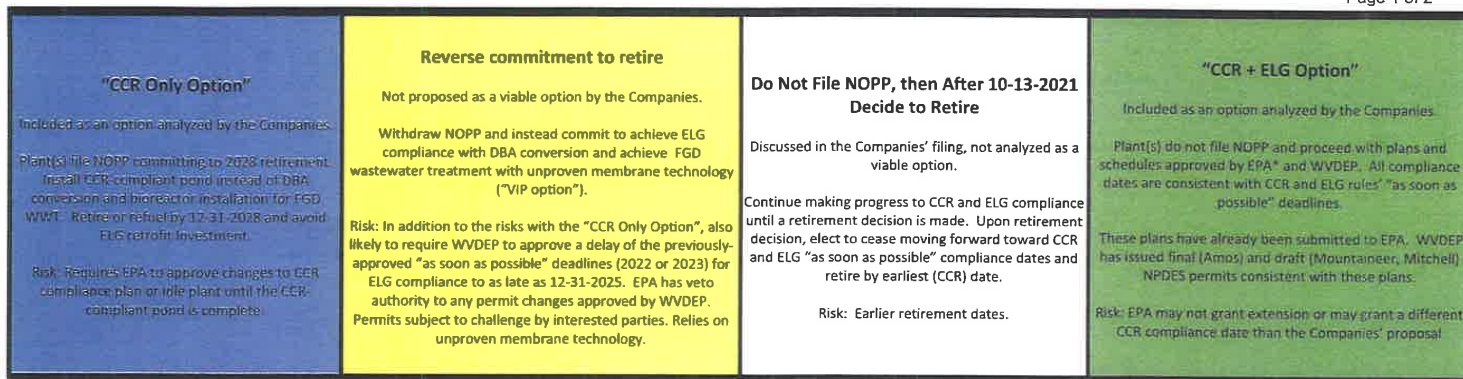
James R. Bacha
AMERICAN ELECTRIC POWER SERVICE CORPORATION
1 Riverside Plaza
Columbus, Ohio 43215

Keith D. Fisher (*WV State Bar #11346*)
AMERICAN ELECTRIC POWER SERVICE CORPORATION
Suite 800, Laidley Tower
500 Lee Street East
Charleston, West Virginia 25301

Counsel for Appalachian Power Company
and Wheeling Power Company

Dated: September 20, 2021

COMPANY EXHIBIT A
 Page 1 of 2



COMPANY EXHIBIT A
 Page 2 of 2

* The Companies submitted plans to comply with the CCR and ELG rules in November 2020. These plans continue to be under review by the EPA, and the relevant compliance dates have been tolled as a result.

Acronym	Definition
CCR	Coal Combustion Residuals Rule
BATW	Bottom Ash Transport Water
ELG	Effluent Limitation Guidelines Rule
NOPP	Notice of Planned Participation - a retirement or refuel (cease coal operations) notice under the ELG Rule
DBA	Dry Bottom Ash
FGD	Flue Gas Desulfurization
WWT	Wastewater Treatment
EPA	United States Environmental Protection Agency
WVDEP	West Virginia Department of Environmental Protection
VIP	Voluntary Incentive Program - alternative ELG compliance option based on unproven technology
NPDES	National Pollution Discharge Elimination System
BATW Compliance Dates	Amos Plant: 12-31-2022
	Mitchell Plant: 6-30-2023
FGD Blowdown Compliance Dates	Amos Plant: 12-31-2023
	Mitchell Plant: 3-31-2025
	Mountaineer Plant: 6-30-2023

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 20th day of September 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, West Virginia 25301
Counsel for Consumer Advocate Division

Susan J. Riggs, Esquire
Jason C. Pizatella, Esquire
Spilman Thomas & Battle, PLLC
300 Kanawha Blvd., East
Charleston, WV 25301
Counsel for WVEUG

Derrick P. Williamson, Esquire
Barry A. Naum, Esquire
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
Counsel for WVEUG

Dorothy E. Jaffe, Esquire
The Sierra Club
50 F Northwest, Eight Floor
Washington, DC 20001
Counsel for The Sierra Club

J. Michael Becher, Esquire
Appalachian Mountain Advocates
PO Box 11571
Charleston, WV 25339
Counsel for The Sierra Club

Evan Dimond Johns, Esquire
Appalachian Mountain Advocates
PO Box 507
Lewisburg, WV 24901
Counsel for The Sierra Club

Emmett Pepper, Esquire
Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
Counsel for CAG/SUN/EEWV

Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General



Anne C. Blankenship



ANNE C. BLANKENSHIP
ATTORNEY AT LAW

P.O. BOX 1791
CHARLESTON, WV 25326

CHARLESTON OFFICE: (304) 344-5800
DIRECT DIAL: (304) 347-8352
FACSIMILE: (304) 344-9566
E-MAIL: acb@ramlaw.com

September 8, 2021

BY ELECTRONIC FILING

Connie Graley, Executive Secretary
Public Service Commission
of West Virginia
201 Brooks Street
Charleston, WV 25301

Re: Appalachian Power Company
and Wheeling Power Company
Case No. 20-1040-E-CN

Dear Ms. Graley:

On behalf of Appalachian Power Company and Wheeling Power Company (together, "the Companies"), I file herewith a **Petition to Reopen Case and to Take Further Action** along with the supplemental direct testimonies of Randall R. Short and Gary O. Spitznogle.

Please file this as appropriate in the above-referenced case. Thank you for your assistance in this matter.

Very truly yours,

Anne C. Blankenship
(W.Va. State Bar #9044)

Counsel for Appalachian Power Company
and Wheeling Power Company

ACB

{R1613555.1}

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**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate
of Public Convenience and Necessity for
internal modifications at coal fired
generating plants necessary to comply with
federal environmental regulations.*

PETITION TO REOPEN CASE AND TO TAKE FURTHER ACTION

COME NOW, Appalachian Power Company (“APCo”) and Wheeling Power Company (“WPCo”) (collectively “the Companies”), pursuant to 150 CSR 1-19.5, and respectfully petition the Public Service Commission of West Virginia (“the Commission”) to reopen Case No. 20-1040-E-CN, an application for a certificate of public convenience and necessity and cost recovery, and to take further action as described herein. In support of this Petition, the Companies respectfully state:

1. On December 23, 2020, the Companies filed an Application seeking a certificate of public convenience and necessity for the Companies to make certain internal modifications at the Amos, Mountaineer, and Mitchell coal-fired generating facilities (“the Facilities”) necessary to comply with federal environmental regulations and to remain operational beyond 2028. In addition to seeking a certificate, the Companies requested approval of an environmental compliance surcharge (“ECS”) to ensure timely recovery of the costs associated with the compliance work.

2. As set forth in the Companies' Application, the Facilities are subject to the Environmental Protection Agency's ("EPA") rules to regulate the disposal and beneficial re-use of coal combustion residuals ("CCR Rule") and effluent limitation guidelines ("ELG Rule") for electric generating facilities. The Facilities must meet requirements under these rules or they must cease operating the units at the Amos, Mountaineer, and Mitchell plants. In addition, the ELG Rule requires the Companies to notify the West Virginia Department of Environmental Protection ("WVDEP"), by October 13, 2021, that they do not intend to make ELG modifications at one or more of the Facilities' units and instead will commit to cease combustion of coal by refueling or retiring the unit(s) before December 31, 2028.

3. The work to be performed on each generating unit of the Amos, Mountaineer, and Mitchell plants is subject to the jurisdiction of two regulatory bodies. The Amos and Mountaineer plants are subject to regulation by both this Commission and the Virginia State Corporation Commission ("VSCC"). The Mitchell plant is subject to regulation by both this Commission and the Kentucky Public Service Commission ("KPSC"). To accommodate the discretion of those bodies and to maximize the chances of a common course of action receiving all needed regulatory approvals, the Companies also filed applications with the VSCC and KPSC seeking approval of CCR and ELG modifications at all three plants, respectively.

4. Ultimately, however, the VSCC and KPSC did not provide the requisite approvals for ELG modifications at the plants subject to their jurisdiction. Furthermore, the VSCC and KPSC decisions were issued after the evidentiary hearing in West Virginia was held before the Commission on June 8 and 9, 2021.

5. On July 15, 2021, the KPSC issued an Order approving compliance work to meet the CCR Rule requirements at Mitchell but denying approval for the compliance work to meet the

ELG Rule requirements. On August 19, 2021, the KPSC issued an order on rehearing that stated the actual closing date of the Mitchell Plant, not the end of Kentucky Power's involvement with Mitchell, should be used for the depreciation rates, to avoid Kentucky Power's customers subsidizing the future use of the CCR projects.

6. On August 4, 2021, the Commission granted a certificate of convenience and necessity authorizing the CCR and ELG projects at APCo's Amos and Mountaineer plants and at the Mitchell plant jointly owned by WPCo and Kentucky Power Company ("Kentucky Power" or "KPCo") and associated cost recovery. The Commission directed in its Order that if there are changes in ownership or cost allocations that are required by decisions in other states, the Companies should bring such changes to the attention of the Commission.

7. On August 23, 2021, the VSCC issued an Order approving recovery of the Virginia jurisdictional CCR investment costs at Amos and Mountaineer, but denying recovery of the Virginia jurisdictional ELG investment costs at those plants, subject to refile for such cost recovery at a later date. APCo is foreclosed from refile with the VSCC until December 2021 and, thus, cannot obtain a further order of the VSCC prior to the WVDEP notification deadline of October 13, 2021.

8. Because the VSCC did not approve cost recovery for the ELG compliance work at Amos and Mountaineer, and the KPSC did not approve ELG compliance work or cost recovery at Mitchell, the Companies must seek recovery of the West Virginia and Virginia jurisdictional costs (i.e., 100% of the costs) of the ELG compliance work at Amos and Mountaineer, as well as the West Virginia and Kentucky jurisdictional costs (i.e., 100% of the costs) of the ELG compliance work at Mitchell, from this Commission in order to proceed with the projects to allow all three plants to remain operational beyond 2028. As directed by the Commission in its Order, the

Companies will address any specific ownership and/or cost allocation changes with the Commission at a later date.

9. Pursuant to Rule 19.5 of the Commission's *Rules of Practice and Procedure*, an application to reopen a proceeding may be made by petition to modify the Commission's Order for reasons which have arisen since the hearing, or by reason of facts not in possession of the petitioner at the time of the hearing. *See* 150 CSR 1-19.5.

10. As the three regulatory bodies did not issue consistent orders to approve the same compliance work and cost recovery at all three plants, and as the KPSC and VSCC orders were issued after the evidentiary hearing in this proceeding, the Companies request that the Commission reopen this matter. Along with this Petition, the Companies submit the supplemental direct testimonies of Randall R. Short and Gary O. Spitznogle to further explain the environmental rule requirements, their implications, and the actions requested from the Commission in this Petition.

11. As set forth in more detail in Company witness Spitznogle's supplemental direct testimony, the ELG rule provides that a facility that commits to retire or cease combustion of coal in its units by December 31, 2028 is subject to different requirements and can avoid having to install dry bottom ash handling and bioreactors to meet the ELG rule's discharge limits, provided that the WVDEP is notified by October 13, 2021 of such a commitment. If the Companies fail to give timely notice to the WVDEP and later choose to retire a unit, that unit must permanently cease combustion of coal by the ELG compliance date specified in its NPDES permit¹, which can be no later than December 31, 2025, making time of the essence in this proceeding.

¹ The ELG compliance date established by the Amos NPDES permit is December 31, 2022. Based on the draft NPDES permits issued for Mitchell and Mountaineer, their ELG compliance dates would be June 30, 2023 and June 6, 2022, respectively. December 31, 2025 is the latest theoretically possible date to come into compliance with the ELG Rule or to cease operation.

12. Therefore, the Companies request that the Commission adjudicate this Petition and issue a final order prior to October 13, 2021 so that the Companies can make an informed decision whether or not to take the actions required by that date.

WHEREFORE, the Companies respectfully request that the Commission reopen this proceeding and issue an order before October 13, 2021 containing the following:

1. A ruling from the Commission that it wants the Companies to proceed with the ELG projects at all three plants, including on KPCo's undivided 50% interest in the Mitchell plant, notwithstanding the new cost estimates, or if not at all plants, then on which plants or units;
2. An acknowledgement from the Commission that additional investments and O&M expenses at the plants will be needed prior to 2028, and will be the responsibility of West Virginia customers, if the plants are to operate beyond 2028;
3. A commitment from the Commission that it will continue to authorize recovery of the costs described in items 1 and 2 above, so long as they are reasonable and prudently incurred, once the Companies incur such costs at the Commission's direction; and
4. Instruction from the Commission that WPCo propose a plan in a future docket that recognizes the changes needed to deal with the issues resulting from any directive from this Commission to perform the ELG work at Mitchell.

Respectfully submitted,

APPALACHIAN POWER COMPANY
WHEELING POWER COMPANY,

By Counsel



William C. Porth (WV State Bar #2943)

Anne C. Blankenship (*WV State Bar #9044*)
Jonathon C. Stanley (*WV State Bar #13470*)
ROBINSON & MCELWEE PLLC
P. O. Box 1791
Charleston, West Virginia 25326

James R. Bacha
AMERICAN ELECTRIC POWER SERVICE CORPORATION
1 Riverside Plaza
Columbus, Ohio 43215

Keith D. Fisher (*WV State Bar #11346*)
AMERICAN ELECTRIC POWER SERVICE CORPORATION
Suite 800, Laidley Tower
500 Lee Street East
Charleston, West Virginia 25301

Counsel for Appalachian Power Company
and Wheeling Power Company

Dated: September 8, 2021

Company Exhibit GOS-SD

**SUPPLEMENTAL DIRECT TESTIMONY OF
GARY O. SPITZNOGLE
ON BEHALF OF APPALACHIAN POWER COMPANY AND
WHEELING POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA IN CASE NO. 20-1040-E-CN**

1 **Q. PLEASE STATE YOUR NAME.**

2 A. My name is Gary O. Spitznogle.

3 **Q. ARE YOU THE SAME GARY O. SPITZNOGLE WHO PREVIOUSLY**
4 **SUBMITTED DIRECT TESTIMONY IN CASE NO. 20-1040-E-CN?**

5 A. Yes, I am.

6 **Q. FOR WHOM ARE YOU TESTIFYING?**

7 A. I am testifying on behalf of both Appalachian Power Company ("APCo") and
8 Wheeling Power Company ("WPCo"), (together, "the Companies").

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to support the Companies' application to reopen this
11 case by explaining the status of the Companies' requests for extension of the Coal
12 Combustion Residual ("CCR") Rule deadline and the significance of the October 13,
13 2021 deadline with respect to the Effluent Limitation Guidelines ("ELG").

14 **Q. WHAT IS THE STATUS OF THE EXTENSION REQUESTS FILED WITH**
15 **THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY (EPA)**
16 **UNDER THE CCR RULE?**

17 A. In November 2020, the Companies submitted requests to the EPA to extend the April
18 11, 2021 CCR Rule deadline to close existing unlined CCR ponds at the Amos,
19 Mitchell, and Mountaineer plants. Per the CCR Rule requirements, those extension



1 requests identified site-specific "as soon as possible" dates to make the plant
2 modifications necessary to continue operations and enable closure of the unlined
3 CCR ponds. As of the date of this filing, the EPA has not issued a decision regarding
4 those requests.

5 **Q. HAVING PASSED THE APRIL 11, 2021 DEADLINE, WHAT ARE THE**
6 **IMPLICATIONS OF NOT YET HAVING A DECISION FROM THE EPA?**

7 A. The EPA has tolled the April 11, 2021 date to begin closing the bottom ash ponds
8 pending its decision on the extension requests. In the meantime, the Companies must
9 continue to make progress consistent with the project plan included in the extension
10 requests.

11 **Q. WHEN MUST THE COMPANIES COMPLY WITH THE ELG RULE?**

12 A. The ELG Rule discharge limits for both bottom ash transport water and flue gas
13 desulfurization ("FGD") wastewater must be achieved by December 31, 2022 and
14 December 31, 2023, respectively, at the Amos Plant, pursuant to the West Virginia
15 Department of Environmental Protection ("WVDEP") final National Pollutant
16 Discharge Elimination System ("NPDES") permit issued for that plant on May 17,
17 2021. Final permits have not been issued for the Mountaineer and Mitchell Plants,
18 but based upon draft permits issued by the WVDEP, it is expected that the applicable
19 compliance deadlines for Mitchell will be June 30, 2023 for bottom ash transport
20 water and March 31, 2025 for FGD wastewater, and for Mountaineer will be June 1,
21 2022 (bottom ash) and July 1, 2023 (FGD).

22 **Q. ARE THERE ANY OTHER OPTIONS AVAILABLE FOR COMPLYING**

1 **WITH THE ELG RULE?**

2 A. Yes. The ELG Rule has an option that allows a unit to continue discharging bottom
3 ash transport water and FGD wastewater, subject to current ELG limitations, in
4 exchange for a commitment to permanently cease combustion of coal (i.e., to refuel
5 or to initiate retirement of the generating unit) by December 31, 2028 (the
6 “Retirement provision”). To comply with the ELG Rule in this way, the Companies
7 must submit written notice to WVDEP no later than October 13, 2021 identifying any
8 unit(s) the Companies elect to retire or refuel under this option.

9 **Q. CAN THE OCTOBER 13, 2021 DATE BE POSTPONED BY EITHER THE**
10 **EPA OR THE WVDEP?**

11 A. No. There is no provision in the ELG Rule that allows for postponement of this
12 notice beyond October 13, 2021.

13 **Q. IF THE COMPANIES DO NOT MAKE A COMMITMENT BY OCTOBER 13,**
14 **2021 TO REFUEL OR RETIRE ANY UNIT OR PLANT, COULD THE ELG**
15 **RULE’S RETIREMENT PROVISION BE INVOKED AT A LATER DATE TO**
16 **COMPLY WITH THE ELG RULE?**

17 A. No. If the Companies fail to give timely notice by October 13, 2021 of a commitment
18 to refuel or retire any plants or units, compliance pursuant to this ELG provision is no
19 longer an option. Instead, work to complete the modifications to convert the units to
20 dry bottom ash handling and to install the additional FGD treatment technology must
21 proceed so as to be in compliance with the ELG discharge limits by the dates
22 ultimately specified in each NPDES permit which, as identified above, will vary by

1 plant.

2 **Q. WHAT HAPPENS IF THE COMPANIES DO NOT PROVIDE NOTICE OF**
3 **AN ELECTION TO UTILIZE THE RETIREMENT OPTION BY OCTOBER**
4 **13, 2021, AND THEN DECIDE TO RETIRE A UNIT AFTER THAT DATE?**

5 A. Assuming a final NPDES permit that imposes ELG obligations for the unit in
6 question has been issued, the Companies would be required to cease coal operations
7 by the earliest ELG compliance date applicable to that unit or plant. For Amos, this
8 would be the December 31, 2022 date specified in the final NPDES permit already
9 issued by the WVDEP. For Mitchell and Mountaineer, these dates are expected to be
10 June 30, 2023 and June 1, 2022, respectively, based on the draft NPDES permits
11 issued by WVDEP. The companies could ask WVDEP to amend the NPDES permit
12 to extend the ELG compliance date and to allow a retiring plant to operate through
13 the last possible ELG compliance date of December 31, 2025, but the WVDEP is not
14 required to agree to such a modification.

15 **Q. PLEASE SUMMARIZE THE IMPORTANCE OF THE OCTOBER 13, 2021**
16 **DEADLINE.**

17 A. October 13, 2021 represents a mandatory fork in the road for ELG compliance. As
18 discussed above, the companies must commit to a binding path for ELG compliance
19 for the Amos, Mitchell, and Mountaineer units by that date either by filing a notice
20 under the Retirement Provision or by not filing such a notice. Simplified to its
21 essence, the Companies must decide, by that date, whether to refuel or retire units
22 (and thereby not incur the expense of the ELG retrofits at those units) or commit to
23 make the ELG retrofits by the compliance deadlines for each unit. If the Companies

1 move forward with the ELG retrofits, the Companies are financially committed to
2 carry out those improvements as soon as practical in order to meet the ELG limits in
3 each NPDES permit and the units would be able to continue coal-fired operations
4 beyond 2028. If the Companies file notice with the WVDEP by October 13, 2021
5 electing to cease coal operations by December 31, 2028, and, such units can be
6 operated through 2028 without incurring ELG investment costs. But, if is the
7 Companies later decide not to complete the ELG compliance improvements for some
8 units, the Companies will be required to cease coal operations at those units by each
9 unit's ELG compliance deadline. Those deadlines for Mitchell, Amos, and
10 Mountaineer are June 30, 2023, December 31, 2022, and June 1, 2022, respectively.
11 This means that if the Companies decide not to go forward with ELG investments
12 after the October 13, 2021 election date, they would have to refuel or retire those
13 units as much as six years earlier. Thus, the election the Companies must make by
14 October 13, 2021 will have a significant impact on both the operating lives of the
15 units and the required level of financial investment in each unit.

16 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

17 **A. Yes, it does.**

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

CASE NO. 20-1040-E-CN

**APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY,**
public utilities.

*Application for the issuance of a Certificate of
Public Convenience and Necessity for internal
modifications at coal fired generating plants
necessary to comply with federal
environmental regulations.*

CERTIFICATE OF SERVICE

I, Anne C. Blankenship, counsel for Appalachian Power Company and Wheeling Power Company, hereby certify that true copies of the foregoing filing were provided electronically on this 8th day of September 2021, addressed to the following:

Wendy Braswell, Esquire
Lucas Head, Esquire
Public Service Commission
201 Brooks Street
Charleston, West Virginia 25301
Counsel for Public Service Commission

Robert F. Williams, Esquire
Heather Osborne, Esquire
Bobby Lipscomb, Esquire
Consumer Advocate Division
300 Capitol Street, Suite 810
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50 F Northwest, Eight Floor
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PO Box 11571
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PO Box 507
Lewisburg, WV 24901
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1500 Dixie Street
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Raghava Murthy, Esquire
Melissa Anne Legge, Esquire
Earthjustice
48 Wall St., 15th Floor
New York, NY 10005
Counsel for CAG/SUN/EEWV

Shannon Fisk, Esquire
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Counsel for CAG/SUN/EEWV

H. Brann Altmeyer, Esquire
Jacob C. Altmeyer, Esquire
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
Counsel for WV Coal Association

Curtis R. A. Capehart, Esquire
Deputy Attorney General
Office of the WV Attorney General
Building 1, Room E-26
Charleston, WV 25301
Counsel for the WV Attorney General



Anne C. Blankenship

COMPANY EXHIBIT RRS-SD

**SUPPLEMENTAL DIRECT TESTIMONY OF
RANDALL R SHORT
ON BEHALF OF APPALACHIAN POWER COMPANY AND
WHEELING POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF
WEST VIRGINIA IN CASE NO. 20-1040-E-CN**

1 **Q. PLEASE STATE YOUR NAME.**

2 A. My name is Randall R. Short.

3 **Q. ARE YOU THE SAME RANDALL R. SHORT WHO PREVIOUSLY**
4 **SUBMITTED REBUTTAL TESTIMONY IN THIS PROCEEDING?**

5 A. Yes, I am.

6 **Q. FOR WHOM ARE YOU TESTIFYING IN THIS PROCEEDING?**

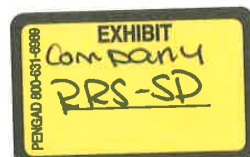
7 A. I am testifying on behalf of Appalachian Power Company (“APCo”) and Wheeling
8 Power Company (“WPCo”), (collectively, the “Companies”). Both APCo and WPCo are
9 operating subsidiaries of American Electric Power Company, Inc.

10 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT**
11 **TESTIMONY?**

12 A. On August 4, 2021, in Case No. 20-1040-E-CN, the Commission granted a certificate
13 of convenience and necessity for CCR and ELG projects on APCo’s Amos and
14 Mountaineer plants and on the Mitchell plant jointly owned by WPCo and Kentucky
15 Power Company (“Kentucky Power” or “KPCo”) and authorized associated cost
16 recovery. In my testimony I provide updated cost estimates for the previously
17 approved projects and explain the need for the following prior to October 13, 2021:

18 1. A ruling from the Commission that it wants the Companies to proceed with the ELG
19 projects at all three plants, including on KPCo’s undivided 50% interest in the Mitchell

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1 plant, notwithstanding the new cost estimates, or, if not at all plants, then on which
2 plants or units;

3 2. An acknowledgement from the Commission that additional investments and O&M
4 expenses at the plants will be needed prior to 2028, and be the responsibility of West
5 Virginia customers, if the plants are to operate beyond 2028; and

6 3. A commitment from the Commission that it will continue to authorize recovery of
7 the costs described in items 1 and 2 above, so long as they are reasonable and prudently
8 incurred, once the Companies incur such costs at the Commission's direction.

9 Finally, I will describe the steps that will need to be taken with respect to the
10 Mitchell plant to allow WPCo to proceed with ELG on that entire plant.

11 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF THE OCTOBER 13, 2021 DATE.**

12 A. The Companies must have clear direction from this Commission prior to October 13,
13 2021, a date associated with the ELG Rule that is described in detail in Company
14 witness Spitznogle's Supplemental Direct Testimony.

15 **Q. PLEASE PROVIDE A SUMMARY OF WHAT HAS HAPPENED IN EACH OF**
16 **THE THREE STATES (WEST VIRGINIA, VIRGINIA AND KENTUCKY)**
17 **WITH REGARDS TO THE COAL COMBUSTION RESIDUALS ("CCR") AND**
18 **STEAM ELECTRIC EFFLUENT LIMITATIONS GUIDELINES ("ELG")**
19 **PROCEEDINGS.**

20 A. The following is a summary of the regulatory actions by jurisdiction, including what
21 has happened since the hearing in this case concluded on June 9, 2021.

22 *West Virginia*

23 On December 23, 2020, the Companies filed an application for a certificate of
24 convenience and necessity to obtain authorization to make internal modifications

1 necessary to comply with federal environmental regulations at the Amos, Mountaineer,
2 and Mitchell coal-fired generating plants.¹ The Companies presented two alternative
3 modification programs: (Alternative 1) keeping all three plants operating through 2040;
4 (Alternative 2) keeping Amos and Mountaineer operating through 2040 but closing
5 Mitchell by 2028. In addition to seeking a certificate, the Companies requested an
6 environmental compliance surcharge (“ECS”) to timely ensure recovery of the West
7 Virginia Jurisdictional share of the costs associated with the compliance work.

8 On August 4, 2021, the Commission issued an order granting a certificate of
9 convenience and necessity (“CCN”) authorizing the Companies to do both CCR and
10 ELG work at all three plants and approved cost recovery through a surcharge. The
11 Commission estimated the West Virginia jurisdictional share of the total costs for
12 Alternative 1 would be \$169.55 million, given a fifty percent ownership interest in
13 Mitchell and a 41.1 percent allocation of the investments in Amos and Mountaineer.
14 The Commission further stated in the order that if there are changes in ownership or
15 cost allocations that are required by decisions in other States, the Companies should
16 bring such changes to the attention of the Commission.

17 Virginia

18 On December 23, 2020, APCo filed with the Virginia State Corporation
19 Commission (“VSCC”) a petition for approval of a rate adjustment clause (“E-RAC”)
20 to recover on a timely basis its projected costs to comply with state and federal

¹ APCO owns 100% interest in the Amos Plant. It consists of three super-critical coal-fired units, with Units 1 & 2 having nameplate capacity of 800 MW each and 1,330MW for Unit 3, for a total nameplate capacity of 2,930 MW. APCO owns 100% interest in the Mountaineer Plant consisting of one super-critical coal-fired plant with a 1,320 MW nameplate capacity. Approximately 41% of these plants are allocated to West Virginia on a jurisdictional basis. Kentucky Power and WPCo each own an undivided 50% interest in the Mitchell plant, which is comprised of two super-critical coal-fired units, Unit 1 with a 770 MW capacity and Unit 2 which has a capacity of 790 MW, for a total capacity of 1,560 MW. The total nameplate capacity of the three plants is 5,810 MW.

1 environmental laws and regulations applicable to generation facilities used to serve its
2 load obligations. APCo requested cost recovery for certain environmental projects
3 related to the installation and retrofitting of certain coal ash ponds at the Amos and
4 Mountaineer Plants as well as actual and forecast operations and maintenance costs
5 related to compliance with State Solid Waste regulation, the National Pollution
6 Discharge Elimination System, and provisions of the Clean Water Act at the plants.
7 APCo stated the projects are required to comply with the EPA CCR and ELG rules.

8 On August 23, 2021, the VSCC issued an order approving cost recovery for the
9 installation of CCR environmental projects at the Amos and Mountaineer plants. The
10 order further stated the VSCC found that APCo did not meet its burden of proving the
11 reasonableness and prudence of the proposed ELG investment costs, including those
12 previously incurred, but that APCo should be permitted to provide additional analyses
13 and evidence to support this ELG investment. While APCo intends to do so, it cannot
14 file in Virginia until after December 23, 2021 due to the 12 month statutory limitation
15 on filing another E-RAC.

16 Kentucky

17 On February 8, 2021, Kentucky Power Company filed an application requesting
18 a Certificate of Public Convenience and Necessity to construct projects at the Mitchell
19 plant to comply with federal environmental regulations, approval of Kentucky Power's
20 2021 Environmental Compliance Plan and to amend its Environmental Surcharge tariff.
21 Kentucky Power stated that the proposed projects and amendments allow Kentucky
22 Power to include the cost of projects to comply with recent revisions to the CCR rule
23 and ELG and that the proposed projects are necessary to continue to operate Mitchell
24 after 2028 through its planned retirement date of 2040. Kentucky Power modeled two

1 options to address CCR and ELG Rules. Case 1 would install equipment to allow
2 Mitchell to operate through 2040; Case 2 would comply with the CCR Rule only,
3 resulting in the need to cease combusting coal at Mitchell by December 31, 2028.

4 On July 15, 2021, the Kentucky Public Service Commission (“KPSC”) issued an
5 order finding that Kentucky Power provided sufficient evidence that Case 2 was
6 necessary and should be approved to comply with the CCR rule. The order further
7 stated that Kentucky Power failed to provide sufficient evidence that the ELG project is
8 necessary. On August 19, 2021, the KPSC issued an order on rehearing that among
9 other things, cited this Commission’s August 4, 2021 Order that approved the ELG
10 work at Mitchell and denied a motion to supplement the record with the Final Order
11 from the KPSC denying the ELG project at Mitchell. The August 19 Order further
12 stated the actual closing date of the Mitchell Plant, not the end of Kentucky Power’s
13 involvement with Mitchell, should be used for the depreciation rates, to avoid Kentucky
14 Power’s customers subsidizing the future use of the CCR projects.

15 In summary, this Commission approved both CCR and ELG compliance work at
16 Amos, Mountaineer, and Mitchell, and cost recovery of such; the VSCC approved CCR
17 and Virginia jurisdictional cost recovery of CCR but not ELG project work or any cost
18 recovery associated with ELG; and the KPSC approved CCR and jurisdictional cost
19 recovery but not ELG project work or cost recovery.

20 These orders obviously conflict with each other. Given that the Companies must
21 make a decision how to proceed prior to October 13, 2021, these inconsistent orders
22 create the need for the Companies to provide additional information to, and obtain
23 additional direction from, this Commission. Depending on the Commission’s decision
24 rendered prior to October 13, 2021 in response to this Petition, the Companies will be

1 able either to take no action on October 13, 2021 (in the event the Commission directs
2 the Companies to perform ELG work at all three plants) or to give notice of the
3 commitment to cease operation in 2028 of any units on which the Commission directs
4 the Companies not to perform ELG work. Even if the Commission directs the
5 Companies to perform ELG work at all three plants, it will be necessary for the
6 Companies to provide additional information to, and to seek a decision from this
7 Commission, in advance of that date, even recognizing that it will be necessary, in the
8 future, for the Companies to file additional information, and seek more specific final
9 approvals of cost allocations and ownership with regard to the plants.

10 In addition, when the Companies filed their application with this Commission
11 on December 23, 2020, the application contained the best information on cost estimates
12 available at that time and the projected revenue requirements for Alternatives 1 and 2
13 that were based on those estimates. This Commission's Order cited those cost
14 estimates when granting the certificate and the cost recovery surcharge. The
15 Companies now have updated cost estimates based on more current information.

16 **Q. WHAT HAS THIS COMMISSION APPROVED IN ITS AUGUST 4, 2021**
17 **ORDER AND WHAT HAS CHANGED RELATIVE TO THE PROJECTS' COST**
18 **AND COST RECOVERY FOR WEST VIRGINIA CUSTOMERS?**

19 A. In its August 4, 2021 Order, this Commission approved a CCN to do both CCR and
20 ELG work at all three plants. Based on the December 23, 2020 filing, the total
21 estimated cost of compliance for APCo that would allow the Amos Plant to continue to
22 operate under the CCR and ELG requirements was \$177.1 million, including \$169.9
23 million in capital. The total estimated cost of compliance for APCo that would allow
24 the Mountaineer Plant to continue to operate under the CCR and ELG requirements was

1 \$72.9 million, including \$70.1 million in capital. The filing also contained information
2 that the West Virginia jurisdictional share of the costs is approximately 41%. In the
3 same filing, the total estimated cost of compliance that would allow the Mitchell Plant
4 to continue to operate under CCR and ELG requirements was \$133.5 million, including
5 \$131.5 million in capital. WPCo's 50% share of total compliance costs at Mitchell is
6 approximately \$67 million. Based upon these allocated costs and other revenue
7 requirements including depreciation, taxes and amortization, the Companies requested a
8 first year revenue requirement of \$4.8 million² if the Commission approved Alternative
9 1 (CCR and ELG compliance work at all three plants) and noticed a revenue
10 requirement of \$23.5 million the first year all of the work would be completed and in
11 service. On August 4, 2021, the Commission authorized a cost recovery surcharge for
12 implementation of Alternative 1.

13 The Companies have continued work in preparation of pursuing compliance at
14 the plants and have updated cost estimates for the projects. The total estimated cost of
15 compliance work for APCo that would allow the Amos Plant to continue to operate
16 under the CCR and ELG requirements is now \$217.3 million. The total estimated cost
17 of compliance work for APCo that would allow the Mountaineer Plant to continue to
18 operate under the CCR and ELG requirements is now \$82.7 million. Finally, the total
19 estimated cost of compliance work that would allow the Mitchell Plant to continue to
20 operate under CCR and ELG requirements is now \$148.3 million. The total cost of
21 compliance work for all three plants that would allow them to continue to operate under
22 the CCR and ELG requirements is now \$448.3 million.

² The first year revenue requirement for Alternative 1 was subsequently revised to \$4.4 million due to an updated capital structure and reflects the August 4, 2021 Order authorized ROE of 9.25%.

1 **Q. DO THESE HIGHER ESTIMATES FOR THE COST OF COMPLIANCE**
2 **WORK CHANGE THE ANNUAL REVENUE REQUIREMENT?**

3 A. Yes they do. Based on the allocations of cost recovery on a jurisdictional basis, as was
4 requested in this case, the first year revenue requirement is now slightly higher and the
5 annual revenue requirement when all of the projects are complete and in service is now
6 estimated to be \$26.7 million annually. On September 1, 2021, the Companies
7 implemented the approved ECS rates authorized in the August 4, 2021 Commission
8 Order. While the Companies are not seeking to change the ECS rates at this time, the
9 higher revenue requirements will be reflected in their over/under-recovery calculations.

10 **Q. IF THE COMPANIES PERFORM THE CCR AND ELG COMPLIANCE WORK**
11 **AT ALL THREE PLANTS, ARE THE COST ALLOCATIONS ON A**
12 **JURISDICTIONAL BASIS STILL THE SAME AS THE PROPOSED**
13 **ALLOCATIONS IN THE COMPANIES' DECEMBER 23, 2020 FILING?**

14 A. All three state commissions approved CCR work at all three plants and the associated
15 cost recovery. Therefore those jurisdictional allocations will be the same. Only this
16 Commission approved and authorized the Companies to perform the ELG work at the
17 plants. Assuming this Commission continues to approve ELG work at all three plants,
18 the total cost recovery of performing that work may be the full responsibility of the
19 West Virginia Customers, given the Companies' understanding of the Commission's
20 August 4, 2021 Order and the potential for the Virginia Commission to deny the ELG
21 investments a second time.

22 **Q. IN ITS AUGUST 4, 2021 ORDER, DID THE COMMISSION CONTEMPLATE A**
23 **SCENARIO WHERE KENTUCKY AND VIRGINIA DID NOT APPROVE ELG**

1 **COMPLIANCE WORK AND THE RESULTING CHANGE IN ALLOCATIONS**
2 **OF COSTS?**

3 A. Yes. Specifically on page 18 of its August 4, 2021 Order, the Commission stated:

4 The possibility of changing ownership or allocations of costs does not change
5 the overall benefits of adding the CCR and ELG controls at all three Plants. In
6 this proceeding, the Companies presented the costs of retiring the Plants in 2028
7 and the costs of alternative power supply options on a total company basis for
8 both APCo and WPCo. Those costs do not change on a relative basis depending
9 on the percentage of ownership or allocation of costs for West Virginia
10 jurisdictional purposes. If there are changes in ownership or allocation of costs
11 and output of any of the three Plants, the Companies should present the nature
12 and effect of such changes to the Commission in an appropriate proceeding. We
13 have always faced the possibility of changes in allocation of costs or ownership
14 shares of jointly-owned plants and have not delayed decisions based on the
15 possibility of such changes. Based on the extensive record before us, we find
16 that the upgrades at all three power Plants are prudent, cost effective, and in the
17 best interest of the current and future utility customers, the State's economy, and
18 the interests of the Companies. We will approve Alternative 1 along with a
19 modified cost recovery mechanism as discussed herein.

20
21 The Commission also stated in the Order that if there are changes in ownership
22 or cost allocations that are required by decision in other States, the Companies should
23 bring such changes to the attention of the Commission.

24 **Q. IF THE COMMISSION DIRECTS THE COMPANIES TO PROCEED WITH**
25 **ELG PROJECTS AT ALL THREE PLANTS AND AUTHORIZES THE FULL**
26 **ASSIGNMENT OF THE ELG COMPLIANCE WORK ON ALL THREE PLANTS**
27 **TO WEST VIRGINIA CUSTOMERS, WHAT IS THE ESTIMATED REVENUE**
28 **REQUIREMENT?**

29 A. It is estimated that the annual revenue requirement for full compliance work under the
30 above assumptions will be approximately \$48 million annually. The chart below breaks
31 down the \$48 million revenue requirement by total CCR and then by ELG for each of the
32 three plants.

1

In millions	Revenue Requirement
CCR WV Jurisdictional	\$ 8.8
Amos ELG (WV Only approach)	\$ 19.2
Mountaineer ELG (WV Only approach)	\$ 5.7
Mitchell ELG (WV Only approach)	\$ 14.3
	\$ 48.0

2

3

4 **Q. WHAT ARE THE COMPANIES SEEKING FROM THE COMMISSION PRIOR**
 5 **TO OCTOBER 13, 2021?**

6 A. 1. A ruling from the Commission that it wants the Companies to proceed with the ELG
 7 projects at all three plants, including on KPCo's undivided 50% interest in the Mitchell
 8 plant, notwithstanding the new cost estimates, or, if not at all plants, then on which
 9 plants or units;

10 2. An acknowledgement from the Commission that additional investments and O&M
 11 expenses at the plants will be needed prior to 2028, and will be the responsibility of
 12 West Virginia customers, if the plants are to operate beyond 2028; and

13 3. A commitment from the Commission that it will continue to authorize recovery of
 14 the costs described in items 1 and 2 above, so long as they are reasonable and prudently
 15 incurred, once the Companies incur such costs at the Commission's direction.

16 The Companies recognize they will need to come back to the Commission to finalize
 17 cost allocations and ownership issues, but with the above, the Companies will be able
 18 to proceed with the ELG investments at the three plants.

19 **Q. IF THE WEST VIRGINIA COMMISSION DIRECTS WPCO TO MAKE THE**
 20 **FULL ELG INVESTMENT, WHAT OTHER STEPS ARE NEEDED TO**
 21 **FACILITATE MITCHELL OPERATIONS PAST 2028?**

1 A. In contrast to Amos and Mountaineer, which are wholly owned by APCo, there are
2 potential issues to deal with to facilitate ELG investment in a plant in which WPCo only
3 has an undivided 50% interest. If one of the two owners is directed to make the ELG
4 investment and assume 100% cost responsibility, this creates a situation where each
5 owner has a differing operating assumption for the plant and the length of its operations.
6 The current operating agreement and the plant's ownership structure are ill suited to
7 address this new operational paradigm. Initially, the operating agreement will need to be
8 updated, but there will also be a need to develop a path to WPCo's ownership of the
9 entire Mitchell plant after 2028.

10 Given that these issues will need to be resolved in the near future, the Companies
11 request that the Commission instruct WPCo to propose a plan in a future docket that
12 recognizes the changes needed to deal with the issues resulting from any directive of this
13 Commission to perform the ELG work at Mitchell.

14 **Q. WHAT ISSUES WILL BE PRESENTED BY WPCO IN THE NEW**
15 **PROCEEDING?**

16 A. In development of this plan, WPCo will work with Kentucky Power to propose an update
17 to the Mitchell Operating Agreement for approval by both Commissions that enables
18 West Virginia to operate Mitchell past 2028 and to address the issue of ownership of the
19 plant at the end of 2028. Cooperation between Kentucky and West Virginia will be
20 important to ensure that the flexibility sought by the Commission can be accomplished.
21 This approach will allow the owners to develop a plan acceptable to both the West
22 Virginia and Kentucky Commissions and to implement each state's orders regarding
23 acceptable CCR/ELG investment and the corresponding life of the plant for customer
24 use in each jurisdiction.

- 1 Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?
- 2 A. Yes, it does.

United States
Environmental Protection
Agency

Office of Water
Washington, DC 20460

EPA-821-R-20-001
August 2020



Supplemental Technical Development Document for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category

EXHIBIT
Sierra Club
9-24-21
PENGLAB 800-831-6988



Supplemental Technical Development Document for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category

EPA-821-R-20-001

August 2020

U.S. Environmental Protection Agency
Office of Water (4303T)
Washington, DC 20460

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Questions regarding this document should be directed to:

U.S. EPA Engineering and Analysis Division (4303T)
1200 Pennsylvania Avenue NW
Washington, DC 20460
(202) 566-1000

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SECTION 4 TREATMENT TECHNOLOGIES AND WASTEWATER MANAGEMENT PRACTICES

This section provides an overview of treatment technologies and wastewater management practices at steam electric power plants for flue gas desulfurization (FGD) wastewater and bottom ash (BA) transport water. All technologies evaluated as part of the 2015 rule are still being used in the industry; see the 2015 TDD for a full description of these technologies. This section focuses primarily on technologies identified for the treatment of FGD wastewater and BA transport water since the 2015 rule.

4.1 FGD WASTEWATER TREATMENT TECHNOLOGIES

In promulgating the 2015 rule, EPA identified surface impoundments as the most prevalent treatment technology for plants discharging FGD wastewater, and chemical precipitation (i.e., tank-based systems designed primarily to remove suspended solids) as the second most common treatment technology. These technologies are described in the 2015 TDD. While approximately half of the industry discharging FGD wastewater still relies on these technologies, with the most prevalent now being chemical precipitation, more advanced treatment technologies have become more common since the 2015 rule. Several plants have upgraded their FGD wastewater treatment by installing either biological or thermal treatment systems. The biological systems installed have been either the high residence time anoxic/anaerobic biological technology—used as the basis for the FGD BAT (best available technology economically achievable) limitations in the 2015 rule— or a similar process that targets removal of the same pollutants in a smaller system with a shorter hydraulic residence time in the bioreactor. Thermal systems installed have been either a spray dryer evaporator, an adiabatic evaporator, or the falling-film evaporator design, which was used as the basis for the NSPS limitations and the BAT Voluntary Incentive Program (VIP) in the 2015 rule. See the 2015 TDD for a description of thermal treatment technologies and other zero discharge technologies.

EPA also identified several additional treatment technologies that were developed (or adapted from other industry sectors) in recent years and have been tested at some domestic power plants or had been tested or installed at foreign power plants. This section provides a summary of the treatment technologies evaluated as part of the final rule, including:

- Biological treatment.
- Zero-valent iron (ZVI).
- Membrane filtration.
- Thermal treatment.
- Encapsulation.
- Other pilot-scale-tested technologies.

Section 4—Treatment Technologies and Wastewater Management Practices

4.1.1 Biological Treatment

Several types of biological treatment systems are currently used to treat FGD wastewater. These biological technologies include:

- Anoxic/anaerobic biological treatment systems, designed to remove selenium and other pollutants.
- Sequencing batch reactors, which alternate between aerobic and anaerobic stages to remove nitrates and ammonia.
- Aerobic bioreactors for reducing biological oxygen demand (BOD).

These biological treatment processes are typically operated downstream of a chemical precipitation system or a solids removal system (e.g., clarifier or surface impoundment).

The anoxic/anaerobic biological technology is designed to remove selenium, nitrate-nitrite, mercury and other pollutants. This process uses an anoxic/anaerobic fixed-film bioreactor that consists of an activated carbon bed or other permanent porous substrate that is inoculated with naturally occurring, beneficial microorganisms. The microorganisms grow within the substrate, creating a fixed film that retains the microorganisms and precipitated solids within the bioreactor. The system uses microorganisms chosen specifically for use in FGD systems because of their hardiness in the extreme water chemistry, as well as selenium respiration and reduction.

The microorganisms reduce the selenate and selenite to elemental selenium, which forms nanospheres that adhere to the cell walls of the microorganisms. The microorganisms can also reduce other metals, including arsenic, cadmium, nickel, and mercury, by forming metal sulfides within the system (Pickett, 2006).

High Residence Time Reduction Biological Treatment

High residence time reduction (HRTR) biological treatment systems consist of chemical precipitation followed by an anoxic/anaerobic fixed-film bioreactor. This technology, as it has been applied at plants for treating FGD wastewater, uses equipment that is large enough to provide for hydraulic residence times in the bioreactor that are typically on the order of 10 to 16 hours. Plants usually employ multiple bioreactors to provide the necessary residence time to achieve the specified removals. The HRTR biological technology was the basis for effluent limitations established by the 2015 rule.

The bioreactor is designed for plug flow to ensure that the feed water is evenly distributed and has maximum contact with the microorganisms in the fixed film. As wastewater passes through the bioreactor, it goes through zones operating at differing oxidation-reduction potential (ORP). Plants operate the bioreactors to achieve a negative ORP, which provides the optimal environment to reduce selenium to its elemental form. The top part of the bioreactor, where the plant feeds the wastewater, is aerobic with a positive ORP, which allows nitrification and organic carbon oxidation to occur. As the wastewater moves down through the bioreactor, it enters an anoxic zone (negative ORP) where denitrification and chemical reduction of selenium (both selenate and selenite) occur (Pickett, 2006; Sonstegard, 2010).

Section 4—Treatment Technologies and Wastewater Management Practices

The HRTR biological technology is described in detail in Section 7.1.3 of the 2015 TDD. EPA identified at least five plants that have operated this system at full-scale in the steam electric power generating industry. One of these plants no longer operates HRTR and has installed an evaporation system. Several other plants have conducted pilot tests of this technology in preparation for making upgrades to comply with the 2015 rule requirements.

Low Residence Time Reduction Biological Treatment

In the years since EPA first identified the HRTR biological technology during the development of the 2015 rule, power companies and technology vendors have worked to develop processes that target removals of the same pollutants in a smaller system with a lower hydraulic residence time in the bioreactor. These technologies, described here as low residence time reduction (LRTR) technologies, use similar treatment mechanisms (e.g., anoxic/anaerobic fixed-film bioreactors) to remove selenium, nitrate, nitrite, and other pollutants in less time, typically on the order of 1 to 4 hours hydraulic residence in the bioreactor.

One LRTR technology includes a chemical precipitation pretreatment system followed by an anoxic, upflow bioreactor followed by a second stage downflow biofilter. The shorter hydraulic residence time of this system allows for use of smaller bioreactors and other equipment, resulting in a treatment system that is physically much smaller than the HRTR system. Data provided by the power industry and an independent research organization show that the LRTR system performance is comparable to that achieved by HRTR technology. Much of the LRTR bioreactor and related equipment is fabricated off-site as modular components. Modular, prefabricated, skid-mounted components, coupled with the smaller physical size of the system, results in lower installation costs and shorter installation times, relative to HRTR systems, which are usually constructed on-site. At least four plants have installed full-scale LRTR systems currently being used to treat FGD wastewater and this technology has been pilot tested using FGD wastewater at more than a dozen steam electric power plants since 2012.

Another LRTR technology, fluidized bed reactors (FBRs), has historically been used to treat selenium in mining wastewaters; however, it is now being tested on FGD wastewater. The FBR system is also an anoxic/anaerobic fixed-film bioreactor design. It relies on an attached growth process, in which microbial growth forms on granular activated carbon media that is fluidized by an upflow of FGD wastewater through the suspended carbon media. EPA identified 12 pilot studies of the FBR technology for selenium removal in mining, refining/petrochemical, and steam electric industries. Three of these pilot studies involved FGD wastewater.

4.1.2 Zero Valent Iron

ZVI, in combination with other systems such as chemical and physical treatment, can be used to target specific inorganics, including selenium, arsenic, nitrate, and mercury in FGD wastewater.

The technology entails mixing influent wastewater with ZVI (iron in its elemental form), which reacts with oxyanions, metal cations, and some organic molecules in wastewater. ZVI causes a reduction reaction of these pollutants, after which the pollutants are immobilized through surface adsorption onto iron oxide coated on the ZVI or generated from oxidation of elemental iron. The coated, or spent, ZVI, is separated from the wastewater with a clarifier. Spent ZVI can be

Section 4—Treatment Technologies and Wastewater Management Practices

disposed of in a non-hazardous landfill. The quantity of ZVI required and number of reaction vessels can be varied based on the composition and amount of wastewater being treated.

Treatment configurations for FGD wastewater would typically include chemical precipitation followed by ZVI treatment and may also include pretreatment to partially reduce influent nitrate concentrations at plants with high nitrate levels in the FGD purge.¹⁴ The purpose of the nitrate pretreatment is to reduce the consumption rate of the ZVI media, which reacts with both the nitrates and selenium in the wastewater. A potential application for FGD wastewater would employ four reactors in series. This configuration provides extra treatment capacity that allows the operator to bypass and isolate individual units whenever maintenance is needed without having to shut down the entire treatment system. This configuration, by including an extra ZVI reactor in the treatment train, also provides additional polishing treatment capability that can be appealing for some plants.

EPA identified two full-scale installations of the ZVI technology for selenium removal in mining wastewater and seven completed pilot-scale studies of ZVI used for FGD wastewater treatment.^{15, 16} At least four additional pilot-scale studies for FGD wastewater treatment were in the planning stage at plants in the eastern United States, as of 2016. The data in the record from a subset of these pilot tests indicate that the combination of chemical precipitation and ZVI technology, along with nitrate pretreatment where warranted, can produce effluent quality comparable to chemical precipitation followed by low residence time reduction (CP+LRTR), and chemical precipitation followed by high residence time reduction (CP+HRTR) technologies.

4.1.3 Membrane Filtration

These systems are specifically designed to treat high TDS and TSS wastestreams using thin semi-permeable filters or film membranes. Membrane filtration is a treatment process used for the removal of dissolved materials from industrial wastewater and includes microfiltration, ultrafiltration, nanofiltration, forward osmosis, and reverse osmosis (RO) membrane systems. The size of the particle that can pass through the membrane is determined by the membrane pore size, with RO membranes being the most restrictive and microfiltration being the least restrictive. Most membrane filtration systems use pumps to apply pressure to the solution from one side of the semi-permeable membrane to force wastewater through the membrane, leaving

¹⁴ FGD purge with nitrate/nitrite concentrations at or above 100 mg/L typically require additional denitrification before ZVI treatment.

¹⁵ EPA has limited data on the performance and configuration of the two full-scale ZVI systems treating mining wastewater (Butler, 2010). At least one of the systems includes ZVI in combination with a reverse osmosis membrane system to target selenium removal.

¹⁶ In addition to the seven FGD pilots of ZVI, EPA has also observed ZVI technology in treating ash transport water during impoundment dewatering at a plant. In this application, the impoundment water was first treated by reverse osmosis membrane filtration, and the membrane reject stream was sent to ZVI reactors for treatment. The membrane permeate and ZVI effluent streams were both discharged by the plant to surface waters. Although this application was not treating FGD wastewater, many of the pollutants present in FGD wastewater are also present in ash impoundments, and these pollutants were effectively removed by the ZVI process (ERG, 2019). A similar treatment train has been suggested for FGD wastewater: chemical precipitation followed by reverse osmosis membrane filtration, with the membrane reject stream sent to a ZVI stage consisting of three reactors in series. Similar to the treatment system for the impoundment, the RO permeate and ZVI effluent would be discharged (unless the RO permeate was reused within the plant).

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behind dissolved solids retained (“rejected”) by the membrane and a portion of the water. The rate that water passes through the membrane depends on the operating pressure, concentration of dissolved materials, and temperature, as well as the permeability of the membrane.

Forward osmosis (FO) uses a semi-permeable membrane and differences in osmotic pressures to achieve separation. These FO systems use a draw solution at a higher concentration than the feed, (e.g., FGD wastewater) to induce a net flow of water through the membrane. This results in diluting the draw solution and concentrating the feed stream. This technology is different from RO, which utilizes hydraulic pressure to drive separation. FO technology is typically better suited for high-fouling streams than traditional RO because external pumps are not needed to drive treatment.

Membrane systems separate feed wastewater into two product streams: a permeate stream, which is the “clean” water that has passed through the membrane, and the concentrate stream, which is the water (or brine) rejected by the membrane. The percentage of membrane system feed that emerges from the system as permeate is known as the water recovery. Depending on wastewater characteristics, membrane systems may require pretreatment to remove excess TSS and organics to prevent scaling and fouling in industrial applications. Fouling occurs when either dissolved or suspended solids deposit onto a membrane surface or a microbial biofilm grows on the membrane surface and degrades its overall performance.

As part of the reconsideration of the 2015 rule, the Agency identified and further reviewed several new uses of membrane filtration technologies currently being studied in the industry. Depending on the FGD wastewater characteristics, these membrane systems typically include nanofiltration membranes, RO, or FO. To reduce fouling, membrane filtration systems have been designed with vortex generating blades or vibratory movement. Other technologies focus on a microfiltration pretreatment step that targets scale-forming ions where FGD wastewater characteristics indicate potential fouling.

Incorporating membranes into existing chemical precipitation systems can improve the efficiency of the membrane system and may help lower the capital and operation and maintenance costs. Many of the systems piloted for FGD wastewater to date have included some type of pretreatment to reduce TSS before entering the membrane system (e.g., surface impoundment, chemical precipitation, microfiltration). Membrane systems can also be configured with a post-processing RO system to further remove pollutants from the permeate. Additionally, membrane systems can be used in combination with other technologies (e.g., thermal evaporation) to treat FGD wastewater or achieve zero discharge.

Permeate streams from these systems can be reused within the plant or discharged, while reject streams (i.e., concentrated brine) would be disposed of in a landfill using encapsulation (See Section 4.1.5), in a commercial injection well, or another process, such as thermal system treatment (see Section 4.1.4).

EPA identified two full-scale domestic installations of reverse osmosis and one in South Africa for selenium or nitrate removal in the mining industry, and five domestic pilot studies in the petroleum refining and agriculture industries. EPA further identified four full-scale installations of membrane filtration in the coal-to-chemical industry in China and the textile industry in

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India.¹⁷ In the steam electric industry, EPA identified 17 pilot-scale studies of nanofiltration and reverse osmosis used for FGD wastewater treatment world-wide (ERG, 2020af) and 12 full-scale installations in China, South Korea, and Finland (ERG, 2020aa; Beijing Jingneng Power, 2017; Nanostone, 2019; Lenntech, 2020; and Broglio, 2019).¹⁸ Some of the full-scale systems employ pretreatment and a combination of RO and forward osmosis. Others operate pretreatment followed by nanofiltration and RO. At least one plant uses thermal treatment to produce a crystallized salt from the brine which is sold for industrial use. EPA is also aware of one U.S. facility that is conducting a long-term pilot to test a membrane filtration system for the treatment of FGD wastewater (ERG, 2020x). Data from this pilot are not available.

4.1.4 Thermal Treatment

Thermal technologies include a variety of treatment technologies that use heat to evaporate water and concentrate solids and other contaminants. Some of these systems can be operated to achieve full evaporation of all liquid, resulting in only a solid product, or achieve partial evaporation of liquid. These thermal technologies can also be used in combination with other technologies to treat FGD wastewater or achieve zero discharge.

One type of thermal treatment uses brine concentrators followed by crystallizers, which generates a distillate stream and solid byproduct that can be disposed of in a landfill. As described in the 2015 TDD, three U.S. plants have installed brine concentrator systems for FGD treatment and at least four coal-fired power plants in Italy also operate this type of system for FGD wastewater. Since proposal, EPA has identified one additional full-scale installation of thermal treatment for FGD wastewater at a U.S. plant (ERG, 2020d). As described in Section 4.1.3, in addition to full-scale thermal treatment alone, EPA identified coal-fired steam electric power plants in China that have installed brine concentrators followed by crystallizers following membrane filtration to treat FGD wastewater. This treatment configuration was evaluated as part of the 2015 rule (see Section 7.1.4 of the 2015 TDD for a detailed description of this treatment configuration). As part of this final rule development, EPA identified several additional thermal technologies that rely on this same premise, i.e., using heat to evaporate water and concentrate contaminants.

Spray dryers are an example of a technology that is being applied to FGD wastewater treatment. These systems utilize a hot gas stream to quickly evaporate liquid resulting in a dry solid or powder. For FGD applications, a slipstream of hot flue gas from upstream of the air heater can be used to evaporate FGD wastewater in a vessel. The FGD solids are carried along with the flue gas slipstream, which is recombined with the main flue gas stream. All solids are then removed with the fly ash by the main particulate control equipment (e.g., electrostatic precipitator or fabric filter) and disposed of in a landfill. In cases where fly ash is marketable, and contamination is a concern, a separate particulate control system can be operated on the flue gas

¹⁷ EPA has limited data on the performance and configuration of the two full-scale membrane systems treating mining wastewater and the pilot-scale systems in other industries (Wolkersdorfer, 2015; U.S. EPA, 2014; CH2M Hill, 2010; ERG, 2020aa; ERG, 2019c). These systems may include a variety of membrane systems including nanofiltration, microfiltration, and RO systems.

¹⁸ EPA has limited details on these full-scale membrane systems. Some references include only plant name or location. For this reason, some references may be describing the same installation, and EPA does not have enough information to determine where this may be the case.

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slipstream to capture FGD solids alone. While these spray dryer systems can be an efficient treatment of FGD wastewater, retrofitting these systems into existing plants could be difficult.

One vendor has developed a proprietary technology that combines concepts of the brine concentrator and spray dryer to achieve zero discharge without a crystallizer. The system, referred to as an adiabatic evaporator technology, injects wastewater into a hot feed gas stream to form water vapor and concentrated wastewater. The air-water mixture is separated in an entrainment separator. Water vapor is exhausted, and wastewater is sent to a solid-liquid separator. The concentrated wastewater is recycled and sent back through the system while the solids can be landfilled. An alternative configuration would be to not recycle the concentrated wastewater and instead reject it from the system. This reject stream could be encapsulated, by mixing with fly ash, and landfilled. Pretreatment of FGD wastewater is not required but, for situations where TSS exceeds 5 percent it may be cost-effective to operate a clarifier upstream of the evaporator to decrease solids. This system was operated at full-scale at a coal-fired steam electric power plant for three years. FGD wastewater was pretreated using a clarifier, then sent to the adiabatic evaporator where 100 percent of the FGD wastewater was evaporated and solids deposited in a landfill. Because propane was used as the heat source, operation and maintenance costs proved to be too costly, and the system was replaced.

Another vendor has developed a modular brine concentration technology. This system uses thermal energy to heat FGD wastewater and facilitate evaporation. As the wastewater boils, steam is collected, compressed, and directed into proprietary technology that allows the heat to transfer from the steam to the concentrated wastewater stream; causing it to become superheated. As water evaporates from the superheated wastewater, the steam is collected and condensed. This distillate stream can be reused in the plant as cooling tower make up or within the FGD scrubber. The concentrated wastewater, referred to as brine, is discharged from the system once it reaches a set TDS concentration (not to exceed 200,000 parts per million (ppm)). This brine stream is treated through hydrocyclones to remove suspended solids. The resulting liquid can be solidified and landfilled. Pretreatment of FGD wastewater is only required when TSS concentrations exceed 30 ppm. Chemicals are added to maintain pH and inhibit crystal and scale formation. This technology has been pilot tested at four coal-fired power plants in 2015 and 2017.

4.1.5 Encapsulation

Encapsulation is another technology option that may prevent FGD wastewater discharge. Encapsulation is the process by which temperature and chemical reactions are used to bond materials together. This process can also be referred to as fixation or solidification. This technology has been used by plants operating inhibited oxidation scrubber systems, where byproducts from the scrubber are mixed with fly ash and lime to produce a non-hazardous landfillable material. This same approach is being tested with pretreated FGD wastewater by mixing concentrated FGD wastewater, from membrane systems or thermal systems that only achieve partial evaporation. The concentrated FGD wastewater is mixed with various combinations of fly ash, hydrated lime, sand, and/or Portland cement to encapsulate contaminants. Tests of these materials have confirmed that the solids generated meet solid waste leaching requirements (toxicity characteristic leaching procedure (TCLP), and other local landfill regulations (Pastore and Martin, 2017; Martin, 2019).

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4.1.6 Other Technologies Under Investigation

EPA also identified several emerging technologies for FGD wastewater treatment. EPA reviewed EPRI reports, industry sources, and published research articles describing alternative FGD wastewater treatment technologies being evaluated to date and identified several that are in the early stages of development. While the technologies described in this section have not been implemented at full-scale levels in the steam electric power generating industry to date, these technologies have been evaluated in pilot-scale testing for FGD wastewater at power plants.

Electrodialysis Reversal and Reverse Osmosis Technology

Electrodialysis reversal (EDR) is a technology that uses an electric current to migrate dissolved ions through stacks of alternating cationic and anionic ion exchange membranes. While this process is typically used to desalinate water, it is now being used to treat FGD wastewater in pilot-scale tests. The EDR technology results in three wastestreams, one permeate stream and two wastestreams. The permeate stream can be further treated with a RO system to remove additional metals and conventional pollutants. Reject from the RO is recycled through the EDR process while the RO permeate can be reused as cooling tower make up or within the FGD scrubber. The two wastestreams, one a calcium chloride rich brine stream and one a sodium sulfate rich brine stream, can be recombined to produce gypsum (CaSO_4), solidified, or treated using a crystallizer. This system has been bench-scale tested using FGD wastewater in 2017 and pilot-scale tested for 60 days in the spring of 2018 (ERG, 2020ab).

Closed-Loop Mechanical Vapor Recompression

Mechanical vapor compression is a technology that can be used to treat FGD wastewater, as well as other wastestreams, and was evaluated as a technology option under the 2015 rule. A vendor has come up with a proprietary application of this technology that operates as a closed-loop system. The system uses four interconnecting loops to pre-heat process wastewater, concentrate and crystallize wastewater using turbulent flow heat exchangers, and recover and condense steam to produce a clean distillate stream. This technology is currently used in full-scale operations in metal working and manufacturing applications. EPRI and the technology vendor operated a pilot test of the system to treat FGD wastewater from power plants at the Plant Bowen Water Research Center in 2015 (EPRI, 2015).

Distillation-Based Thermal Transfer System

One vendor has developed a proprietary combination of technologies that operate as one thermally-balanced system to treat industrial wastewater streams. This technology combines degassing, distillation, and demisting to heat industrial wastewater streams, generating a clean water stream and gray water or brine stream. The gray water or brine stream is a concentrated wastewater stream that either flash crystallizes upon discharge or crystallizes upon cooling, resulting in zero liquid discharge. Energy required to drive degassing and distillation can come from steam, natural gas, flue gas, waste heat, or other renewable sources such as solar or geothermal, depending on availability. The vendor has conducted bench scale testing using FGD wastewater and is currently pursuing pilot testing opportunities with industry trade groups and

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individual plants. This technology has also been tested on produced water from the oil and gas industry and cooling tower blowdown.

4.2 BOTTOM ASH HANDLING SYSTEMS AND TRANSPORT WATER MANAGEMENT AND TREATMENT TECHNOLOGIES

As part of this reconsideration, EPA reviewed bottom ash handling systems designed to minimize or eliminate the discharge of BA transport water that are operated by coal-fired steam electric power plants or marketed by bottom ash handling vendors. As part of the 2015 rule, EPA determined that almost 60 percent of the coal-fired power plants in the industry operate wet-sludging systems on one or more of their coal-fired EGUs. As described in Section 3, many plants have installed, or are installing, bottom ash handling systems that minimize or eliminate the discharge of BA transport water. Specifically, EPA now estimates that just 22 percent of coal-fired steam electric power plants in the industry (projected to be operating beyond 2028) operate wet sluicing systems (see the 2015 TDD for more details on wet sluicing systems). The bottom ash handling technologies evaluated by EPA are listed below:

- Mechanical Drag System.
- Remote Mechanical Drag System.
- Dry Mechanical Conveyor.
- Dry Vacuum or Pressure System.
- Compact Submerged Conveyor.

4.2.1 Mechanical Drag System

A mechanical drag system collects bottom ash from the bottom of the EGU through a transition chute and sends it into a water-filled trough. The water bath in the trough quenches the hot bottom ash as it falls from the EGU and seals the EGU gases. The drag system uses a parallel pair of chains attached by crossbars at regular intervals. In a continuous loop, the chains move along the bottom of the water bath, dragging the bottom ash toward the far end of the bath. The chains then move up an incline, dewatering the bottom ash by gravity and draining the water back to the trough. Because the bottom ash falls directly into the water bath from the bottom of the EGU and the drag chain moves constantly on a loop, bottom ash removal is continuous. The dewatered bottom ash is often conveyed to a nearby collection area, such as a small bunker outside the EGU building, from which it is loaded onto trucks and either sold or transported to a landfill. See Section 7.3.3 of the 2015 TDD for more specific system details.

The mechanical drag system does generate some wastewater (i.e., residual water that collects in the storage area as the bottom ash continues to dewater). This wastewater is either recycled back to the quench water bath or directed to the low volume waste system. This wastewater is not BA transport water because the transport mechanism is the drag chain, not the water (see 40 CFR 423.11(p)).¹⁹

¹⁹ The mechanical drag system does not need to operate as a closed-loop system because it does not use water as the transport mechanism to remove the bottom ash from the boiler; the conveyor is the transport mechanism. Therefore,

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This system may not be suitable for all EGU configurations and may be difficult to install in situations where there is limited space below the EGU.²⁰ These systems are not able to combine and collect bottom ash from multiple EGUs and most installations require a straight exit from the EGU to the outside of the building. In addition, these systems may be susceptible to maintenance outages due to bottom ash fragments falling directly onto the drag chain.

4.2.2 Remote Mechanical Drag System

Remote mechanical drag systems collect bottom ash using the same operations and equipment as wet-sludging systems at the bottom of the EGU. However, instead of sluicing the bottom ash directly to an impoundment, the plant pumps the BA transport water to a remote mechanical drag system. This type of system has the same configuration as a mechanical drag system, but with additional dewatering equipment in the trough. Also, it does not operate under the EGU, but rather in an open space on the plant property. See Section 7.3.4 in the 2015 TDD for more specific system design details.

Plants converting their current bottom ash handling systems can use this system if space or other restrictions limit the changes that can be made to the bottom of the EGU. Currently, over 50 coal-fired power plants have installed, or are planning to install, remote mechanical drag systems to handle bottom ash.

Because of the chemical properties of BA transport water, some plants may have to treat the overflow (or a slipstream of the overflow) before recycling, to prevent scaling and fouling in the system. Plants that require treatment to achieve complete recycling of BA transport water could install a pH adjustment system or an RO membrane (as described in EPA's cost methodology in Section 5).

Similar to the mechanical drag system, the drag chain conveys the ash to a collection area and the plant then sells or disposes of it in a landfill. There is also an opportunity for multiple unit synergies and redundancy with remote mechanical drag systems because they are not operating directly underneath the EGU. This system requires less maintenance compared to the mechanical drag system because the bottom ash particles entering the system have already been through the grinder prior to sluicing.

4.2.3 Dry Mechanical Conveyor

Dry mechanical conveyor systems operate similarly to mechanical drag systems, but instead of collecting the bottom ash in a water bath, it is collected directly onto a dry conveyor. The system introduces ambient air countercurrent to the direction of the bottom ash using the negative pressure in the furnace. Adding more air activates reburning, which reduces unburned carbon and adds thermal energy to the steam electric power generating process in the EGU, making the EGU more efficient. The dry conveyor then takes the bottom ash to an intermediate storage destination. The modular design of the system allows it to be retrofitted into plants with space or

any water leaving with the bottom ash does not fall under the definition of "bottom ash transport water," but rather, is a low volume waste.

²⁰ In comments on the 2013 proposed ELG, three plants reported space constraints below the boiler such that a mechanical drag system could not be installed.

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headroom limitations and a wide range of steam electric EGU capacities (from 5 MW to 1,000 MW). See Section 7.3.5 of the 2015 TDD for more details.

4.2.4 Dry Vacuum or Pressure System

Dry vacuum or pressure bottom ash handling systems transport bottom ash from the bottom of the EGU into a dry hopper, without using any water. The system percolates air into the hopper to cool the ash, combust additional unburned carbon, and increase the heat recovery to the EGU. Periodically, the grid doors at the bottom of the hopper open to allow the bottom ash to pass into a crusher. The system then conveys the crushed bottom ash by vacuum or pressure to an intermediate storage location. See Section 7.3.6 of the 2015 TDD for more details.

Dry vacuum or pressure systems eliminate water requirements and improve heat recovery and EGU efficiency. These systems are also less complicated to retrofit because there are fewer structural limitations (e.g., headspace requirements below the EGU) and the systems can be installed to collect bottom ash from multiple EGUs and send it to one intermediate storage location.

4.2.5 Compact Submerged Conveyor

Compact submerged conveyors (CSCs), also referred to as submerged grind conveyors, collect bottom ash from the bottom of the EGU. The system uses existing equipment—bottom ash hoppers or slag tanks, the bottom ash gate, clinker grinders, and a transfer enclosure—to remove bottom ash from the hopper continuously. From the bottom of the EGU, bottom ash falls into the water impounded hopper or slag tank. It is then directed to the existing grinders to be ground into smaller pieces and is then transferred to a fully-enclosed bottom carry chain and flight conveyor system. Similar to a mechanical drag system, except for the fully-enclosed bottom carry design, a drag chain continuously carries and dewater bottom ash up an incline, away from the EGU. Because the transport mechanism is a conveyor instead of water, CSCs do not generate BA transport water.²¹ The dewatered bottom ash is transferred to one or more additional conveyors, which transports it to a bottom ash silo or bunker where the bottom ash is collected in a truck and transported to its final destination. CSCs use additional conveyors to avoid existing structures such as pillars and coal pulverizers while conveying bottom ash out of the EGU house. This makes it possible to install CSCs in some plants where physical constraints prevent installation of mechanical drag systems; however, physical constraints would similarly prevent CSC installation at other plants. CSCs can also use smaller chains and are narrower and shorter than mechanical drag systems, features that potentially allow them to fit in locations where there is insufficient space to install the larger mechanical drag system conveyors.

The systems can be isolated from the hopper using the existing transfer enclosures to perform maintenance while the EGU remains on line (made possible by the bottom ash storage capacity of the hopper). It is also possible for some plants to install parallel conveyors for redundancy (ERG, 2020t, 2020v, 2020ac, and 2020ad).

²¹ Similar to the mechanical drag system, the CSC system is considered a dry handling technology because it does not use water as the transport mechanism.

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For plants that are able to repurpose their wet sluicing equipment (hoppers, slag tanks, and/or clinker grinders, etc.), the capital costs of converting to CSC systems are typically lower, and installation and outage times are shorter compared to other under-the-EGU bottom ash handling systems. However, because a CSC serves just one EGU, the more EGUs a plant has, the less economical this technology becomes.

EPA is aware of two plants that have installed and are operating this type of bottom ash handling system in the United States. EPA is also aware of at least three more plants in the U.S. that are in the process of installing CSC systems and expected to begin operating in early 2021. EPA understands that these facilities do not have vertical space constraints under the EGUs.



2020 Steam Electric Reconsideration Rule

Implementation Briefing for the Public

November 5, 2020

Office of Water | Office of Science and Technology | Engineering and Analysis Division

Presented by Richard Benware, Project Manager

1



Background

- In 2015, EPA issued a final rule updating the effluent limit guidelines (ELGs) for steam electric power plants (**40 CFR Part 423**).
- That rule was subject to multiple legal challenges and two petitions for administrative reconsideration.
- In 2018, EPA agreed to reconsider the ELGs for :
 - Flue gas desulfurization (FGD) wastewater and
 - Bottom ash (BA) transport water
- The final reconsideration rule, signed on August 31, 2020, contains revised ELGs for these two waste streams.

Overview

- **Part I: Summary of the Final Rule**
 - Flue Gas Desulfurization (FGD) Wastewater BAT/PSES
 - Bottom Ash (BA) Transport Water BAT/PSES
 - Voluntary Incentives Program (VIP)
 - New Subcategories
 - Compliance Timing
 - Incorporating the Revised Limitations in Permits

- **Part II: Additional Reporting & Recordkeeping Requirements for the Voluntary Incentives Plan (VIP), Low Utilization Electric Generating Units (LUEGUs), and Electric generating units permanently ceasing coal combustion (PC3 EGUs)**
 - Notice of Planned Participation; Annual Progress Reports **§423.19(e),(f),(h)**
 - Transfer Between Subcategories **§423.13(o); §423.19(i)**
 - Notice of Material Delay **§423.19(j)**
 - Permit Conditions **§423.18; §423.19(g)**

- **Part III: Implementing BA Transport Water Limitations**
 - High Recycle Rate (HRR) System Implementation
 - Best Management Practices (BMP) Plans

Part I: Summary of the Final Rule

Summary of the Final Rule: What Changed?

- Revises the technology basis, limitations, and compliance dates for
 - FGD wastewater, and
 - BA transport water.
- Revises the technology basis, limitations, and compliance dates for the VIP for FGD wastewater.
- Creates new subcategories with tailored limitations and compliance dates for
 - High-flow power plants,
 - Low utilization electric generating units (LUEGUs), and
 - Electric generating units permanently ceasing coal combustion by 2028 (PC3 EGUs).

Summary of the Final Rule: FGD

- FGD Wastewater BAT/PSES
 - BAT – Best Available Technology Economically Achievable
 - PSES Pretreatment Standards for Existing Sources
- *Technology Basis*: Chemical Precipitation (CP) followed by **L**ow Hydraulic **R**esidence **T**ime Biological **R**eduction (LRTR)
- *Limitations*:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (ug/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

Summary of the Final Rule: BA

- BA Transport Water BAT/PSES
 - Technology Basis: HRR Systems
 - Limitations: “The total volume of the discharge authorized in this subsection shall be determined on a case-by-case basis by the permitting authority and in no event shall such discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume.” §423.13(k)(2)(i)(B); §423.16(g)(2)(i)(B)

Further discussion of the limitations is presented in Part III

Summary of the Final Rule: VIP

- VIP for FGD Wastewater Direct Dischargers
 - Technology Basis: Membrane Filtration Systems
 - Limitations:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	5	NA
Mercury, total (ng/L)	23	10
Selenium, total (ug/L)	10	NA
Nitrate/nitrite as N (mg/L)	2.0	1.2
Bromide (mg/L)	0.2	NA
TDS (mg/L)	306	149

Summary of the Final Rule: Subcategories

- High FGD Flow Plants (FGD Wastewater ONLY)
 - Qualification Threshold: “[T]he maximum daily volume of FGD wastewater that could be discharged by a facility is above 4 million gallons per day after accounting for that facility’s ability to recycle the wastewater to the maximum limits for the FGD system materials of construction.” §423.11(x)
 - Subcategory FGD Technology Basis: CP
 - Subcategory FGD Limitations:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

Summary of the Final Rule: Subcategories

- Low Utilization Electric Generating Units (LUEGUs)
 - Qualification Threshold: “[A]ny electric generating unit for which the facility owner certifies, and annually recertifies, under §423.19(e) that the two-year average annual capacity utilization rating is less than 10 percent.” §423.11(y)-(z)
 - FGD Technology Basis: CP
 - FGD Limitations:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

Summary of the Final Rule: Subcategories

- Low Utilization Electric Generating Units (LUEGUs)
(cont'd)
 - BA Technology Basis: Surface Impoundments
 - BA Limitations:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
TSS (mg/L)	100.0	30.0
Oil and grease (mg/L)	20.0	15.0

-These limitations are supplemented with a BMP Plan

Further discussion of the BMP plan is presented in Part III

Summary of the Final Rule: Subcategories

- Electric Generating Units (EGUs) Permanently Ceasing Coal Combustion by December 31, 2028 (PC3 EGUs)
 - Qualification Threshold: “[T]he owner or operator certifies under §423.19(f) that an electric generating unit will cease combustion of coal no later than December 31, 2028.” §423.11(w)
 - FGD and BA Technology Basis: Surface Impoundments
 - FGD and BA Limitations:

Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
TSS (mg/L)	100.0	30.0
Oil and grease (mg/L)	20.0	15.0

Summary of the Final Rule: Timing

- Compliance deadline for direct dischargers is “as soon as possible” and “no later than” dates specified in the final rule.
 - Earliest date: October 13, 2021
 - No later than date: Wastestream/subcategory dependent (see next slide)
- Permitting authorities must consider the following site-relevant factors:^{1, 2}
 - Time necessary to expeditiously plan, design, procure, and install equipment
 - Changes being made or planned in response to other EPA air and waste regulations (e.g., CCR Part A final rule)
 - An initial commissioning period for FGD wastewater
 - Other factors as appropriate

¹ The final rule does not revise the specified factors that the NPDES permitting authority must consider in determining the as soon as possible date under the 2015 rule. *See* §423.11(t).

² Applicability dates for VIP are not determined through application of §423.11(t) but are instead no later than December 31, 2028.

Summary of the Final Rule: Timing

- For indirect dischargers (PSES), no later than October 13, 2023.
- For direct discharges, no later than:

Limits	FGD Wastewater	BA Transport Water
Generally Applicable	December 31, 2025	December 31, 2025
High Flow Subcategory	December 31, 2023	N/A
LUEGU Subcategory	December 31, 2023	Discharge limits are immediately applicable once incorporated into a permit; BMP plans must be completed by December 31, 2023
PC3 EGU Subcategory	Immediately applicable once incorporated into a permit	Immediately applicable once incorporated into a permit
VIP	December 31, 2028	N/A

Summary of the Final Rule: Timing

- Considerations to keep in mind:
 - The NPDES permitting authority determines the appropriate “as soon as possible” compliance date based on relevant information submitted by the discharger.
 - The compliance date determined by the permitting authority may or may not be different for each wastestream.

Summary of the Final Rule: Timing

- Considerations to keep in mind:
 - EPA recommends that the discharger provide clear, relevant information about the facility being permitted, which may include:
 - Detailed engineering dependency charts,
 - Bids or contracts which include timeframes for installation and operability,
 - Information from comparable sites with an explanation of how that information is relevant to the facility being permitted,
 - Timing for the integrated resource planning process, and/or
 - Timing for public utility commission approvals
 - EPA recommends that the NPDES permitting authority provide a well-documented justification of how it determined the compliance date in the fact sheet or administrative record for the permit.

Summary of the Final Rule: Permits

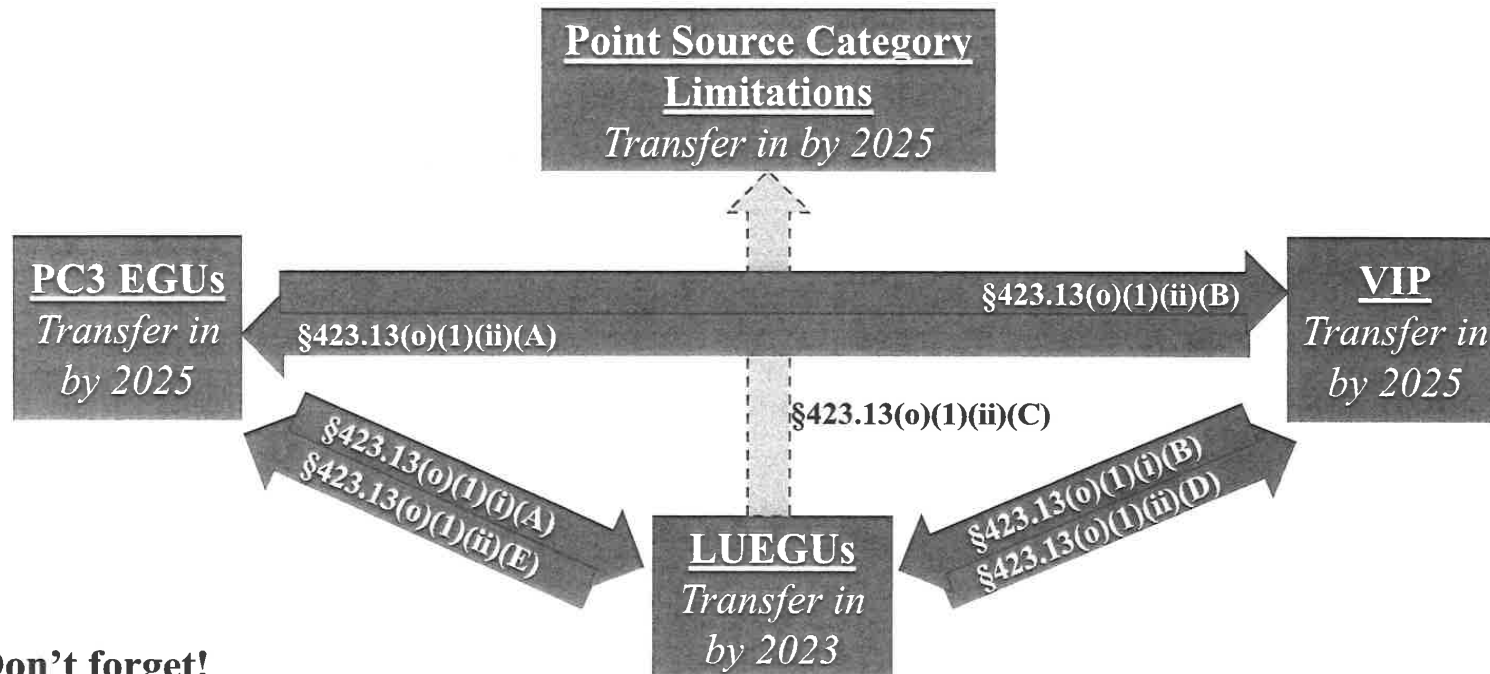
- In cases where a plant's existing NPDES permit includes limitations for BA transport water and/or FGD wastewater from the 2015 rule, the permittee may request a modification and a permitting authority may modify the permit based on promulgation of this rule pursuant to **40 CFR 122.62(a)(3)**.
- Also, under CWA section 510, states can require effluent limitations promulgated in state law as long as they are no less stringent than the requirements of this rule.

Part II: Additional Reporting & Recordkeeping Requirements for the VIP, LUEGUs, and PC3 EGUs

Additional Reporting & Recordkeeping

- Notice of Planned Participation (NOPP) and annual certifications or progress reports are required for:
 - LUEGUs: NOPP & annual certifications – §423.19(e)
 - PC3 EGUs: NOPP and annual progress reports – §423.19(f)
 - VIP: NOPP and annual progress reports – §423.19(h)
- NOPP requirements
 - Identify the facility or EGU and the planned subcategory/VIP election
 - Provide a detailed timeline with interim milestones
 - Provide other details as specified in §423.19(e), (f), or (h)
- Annual progress report requirements
 - Identification of completed milestones
 - Update remaining milestones to be completed

Overview of how §423.13(o) transfers work



Don't forget!

A company must comply with the requirements of its current and future provisions to transfer §423.13(o)(2)

A company must maintain any more stringent limitations already being met §423.13(o)(3)

Example 1

Facility A filed a NOPP in 2021 declaring its intent to retire both of its coal-fired EGUs in 2027 subject to PUC approval with a corresponding timeline of major milestones to accomplish this result. The permitting authority properly established BAT limits on TSS and oil & grease which are effective immediately, and included all potential transfer limits in the final permit. The following year, several nearby retirements have increased electricity demands in Facility A's NERC region, and the PUC disapproved the retirement. Due to local water quality-based effluent limitations for boron, Facility A concludes that the VIP would be less costly and easier to implement.

Facility A should file a NOPP under **§423.19(i)** indicating its intent to transfer under **§423.13(o)(1)(ii)(B)** to the generally applicable limitations for BA transport water and the VIP limitations for FGD wastewater. Filing this NOPP automatically triggers these limitations and the corresponding applicability dates.

Example 2

Facility B filed a NOPP in 2021 declaring its intent to operate its only coal-fired EGU as an LUEGU. Though its prior two years of operations exceed the required 10% CUR, the company explains in its filing that it has decreased utilization over the last several years and presents a timeline with milestones for achieving low utilization by 2023. In the final permit the permitting authority properly established BAT limits on TSS and oil & grease for BA transport water applicable immediately and a BMP plan compliance date of December 31, 2023. The permitting authority also established mercury and arsenic limitations for FGD wastewater with an applicability date of December 31, 2023. Finally, the permit also included all potential transfer limits. In 2024, Facility B's parent company has begun construction of new natural gas plants and wind turbines which will be operational in 2028 and make continued operation of Facility B uneconomic. The parent company has decided to retire the unit; however, because demand in the region has gone up, operation above a 10% CUR would be more profitable in the short term prior to retirement.

Facility B should file a NOPP under **§423.19(i)** indicating its intent to transfer under **§423.13(o)(1)(ii)(E)** to the PC3 EGU limitations. Filing this NOPP automatically triggers these limitations and the corresponding applicability dates, allowing the facility to operate at a higher CUR. The facility satisfies **§423.13(o)(2)** because it is already implementing the BMP plan for BA transport water and the CP system for FGD wastewater required under its permit. The facility must continue to meet these requirements under **§423.13(o)(3)**, even though it is transferring into the PC3 subcategory.

Example 3

Facility C filed a NOPP in 2021 declaring its intent to participate in the VIP, including a timeline with milestones for achieving these limitations with a membrane filtration system by 2028. In the final permit the permitting authority established a 6% volumetric purge limitation for the facility's already constructed remote mechanical drag system and concluded in its BPJ analysis that no further limitations for this purge were appropriate. Since the system was already running with this purge amount, the permitting authority made these limitations applicable immediately. The permitting authority also established mercury, arsenic, selenium, nitrogen, bromide, and TDS limitations for FGD wastewater with an applicability date of December 31, 2028. Finally, the permit also included all potential transfer limits. One year later, Facility C had become less economical such that it operated below a 10% CUR, but was provided payments to remain online for peak demand periods.

Facility C should file a NOPP under **§423.19(i)** indicating its intent to transfer under **§423.13(o)(1)(i)(B)** to the LUEGU limitations. Filing this NOPP automatically triggers these limitations and the corresponding applicability dates, allowing the facility to operate at a lower CUR but without the stringent VIP limitations for FGD wastewater. The facility satisfies **§423.13(o)(2)** because it is already meeting the permit's 6% purge limitation for BA transport water and VIP limitations for FGD wastewater are not yet effective. However, because it is meeting the BA transport water limitations, it must continue to meet these requirements under **§423.13(o)(3)**.

Additional Reporting & Recordkeeping

- The notice of material delay provides the permitting authority more advanced opportunities to address potential compliance challenges. **§423.19(j)**
- Within 30 days of a material delay from the projected milestones of a PC3 EGU or VIP participation, the facility will provide the permitting authority or control authority documentation of:
 - The reason for the delay;
 - The length of the delay; and
 - A proposed resolution for maintaining compliance

Additional Reporting & Recordkeeping

- New **§423.18** (“Permit conditions”) provides certainty that any EGUs qualifying for the LUEGU or PC3 EGU subcategories will not be involuntarily forced out of compliance.
- For each “qualifying event,” a plant must provide:
 - Certification statement (within 30 days of the event commencing)
§423.19(g)(1)-(2)
 - The event type, date, event documentation, and an analysis demonstrating the facility would still meet the LUEGU or PC3 EGU thresholds but for the event
 - Termination of need statement (within 30 days of event terminating)
§423.19(g)(3)-(4)
 - The date of event termination or narrative that elevated utilization due to the event is no longer necessary

Additional Reporting & Recordkeeping

- Qualifying events:
 - Reliability-related orders
 - An emergency order issued under section 202(c) of the Federal Power Act; **§423.18(a)(1)**
 - A reliability must run agreement issued by a public utility commission; **§423.18(a)(2)** or
 - Any other comparable order; **§423.18(a)(3)** or
 - Emergency load balancing
 - Load balancing in an area subject to a Stafford Act “Emergency” or “Major Disaster” **§423.18(a)(4)(i)-(ii)** and
 - Load balancing need is due to the event causing the “Emergency” or “Major Disaster” **§423.18(a)(4)(iii)**

Part III: Implementing BA Transport Water Limitations

BA Transport Water

- There are three potentially applicable requirements:
 - HRR limitations
 - Case-by-case volumetric purge not to exceed 10 percent of system volume
 - Meant to minimize purges to what is necessary on a facility-specific basis
 - BMP plan (LUEGUs only)
 - Case-by-case plan
 - Meant to minimize purges to the extent feasible (may be > 10 percent)
 - TSS and Oil and Grease limitations (LUEGUs and PC3 EGUs)

BA Transport Water

- Steps to implementing generally applicable limitations:
 1. Does the bottom ash system generate ash transport water?
See §423.11(p)
 2. If so, what purges are allowable?
See §423.13(k)(2)(i)(A)(1)-(4) or §423.16(g)(2)(i)(A)(1)-(4)
 3. What amount of these allowable purges are necessary for this system?
See §423.19(c)(3)(G)
 4. Are the amounts of necessary, allowable purges less than 10 percent of the primary active wetted BA system volume?
See §423.11(aa)-(bb) and §423.13(k)(2)(i)(B) or §423.16(g)(2)(i)(B)
 5. Using best professional judgment, what are the appropriate technology-based effluent limitations (TBELs) for these purges?
See §423.11(cc)

BA Transport Water

1. Does the bottom ash system generate ash transport water?
2. If so, what purges are allowable?
 - For water balance after precipitation exceeding a 10-year storm event of 24-hour or longer duration storm event **(A)(1)**
 - For water balance due to regular inflows of other, non-BA wastestreams **(A)(2)**
 - For maintaining water chemistry **(A)(3)**
 - For other necessary maintenance **(A)(4)**
3. What amount of these allowable purges are necessary for this system?

BA Transport Water

4. Are the amount of necessary, allowable purges less than 10 percent of the primary active wetted BA system volume?

- Primary active wetted BA system volume
 - Non-redundant piping
 - Primary BA collection and recirculation tanks
 - Excludes surface impoundments
 - Excludes secondary equipment
 - Excludes non-BA systems
- For continuous purges of (A)(2) and (A)(3) the percent is determined through direct comparison of volumes
- For intermittent purges of (A)(1) and (A)(4) the percent is determined by comparing the volumes after adjusting for the expected purge frequency
- Even if the amount of *necessary* purges are greater than 10 percent, the purge limitation is 10 percent, so nothing over 10 percent is *allowable*.
§423.13(k)(2)(i)(B); §423.16(g)(2)(i)(B)

BA Transport Water

5. Using best professional judgment, what are the appropriate technology-based effluent limitations (TBELs) for these purges?

- The final rule requires applicants to provide information to the permitting authority or control authority by October 13, 2023:
 - Volume, frequency, and assumptions §423.19(d)(3)(F)-(G)
 - Wastewater treatment systems on-site, including type, design capacity, and current or expected operation §423.19(d)(3)(H)-(I)
- In some cases the volumes and frequencies of purges may make them amenable to existing or planned treatment systems with excess capacity.
- In other cases additional treatment systems may be justified by BPJ.
- In still other cases, the large volumes and infrequent nature may preclude treatment beyond BPT.

BA Transport Water

- For LUEGUs, facilities must develop and submit a BMP plan
 - Requires a professional engineer certification **§423.19(d)(1)-(3)**
 - With the permit application; or
 - By October 13, 2021 (whichever is later); or
 - If an indirect discharger, no later than October 13, 2023
 - Requires an annual certification containing **§423.19(d)(4)-(5)**
 - Any updates to the BMP plan
 - An attachment of weekly flow measurements
 - The average amount of BA transport water recycled
 - Inspection reports and maintenance activities
 - A statement that copies of these records are being maintained

BA Transport Water

- Elements of a BMP Plan §423.13(k)(3)
 - i. Identify the LUEGUs
 - ii. Describe the BA system
 - iii. Provide a detailed water balance
 - iv. List *required* preventative maintenance and inspection activities
 - v. Evaluate the *feasibility* of listed options to minimize discharges
 - vi. Describe the recycle system and practices to minimize discharges
 - vii. Provide a schedule of any further treatment upgrades
 - viii. Document the recycle system is well operated and maintained
 - ix. Perform weekly flow monitoring

For Further Information Contact:

• **Richard Benware**
benware.richard@epa.gov
202-566-1369

• **Scott Wilson**
wilson.js@epa.gov
202-564-6087

Also Visit the Reconsideration Rule Website:

<https://www.epa.gov/eg/2020-steam-electric-reconsideration-rule>

Appendix

Also be sure to keep these provisions in mind...

- FGD paste equipment cleaning water is excluded from the definitions of transport water and FGD wastewater, and is therefore a low volume waste. **§423.11(n),(p),(u),(v)**
- “[T]reated FGD wastewater permeate or distillate used as boiler makeup water” is no longer FGD wastewater, and thus is not required to demonstrate compliance with FGD wastewater BAT or PSES. **§423.11(n)**
- BA transport water used in the FGD scrubber becomes FGD wastewater, and thus is subject to the FGD wastewater BAT/PSES at the point of discharge. Thus, BAT/PSES for BA transport water no longer apply to these volumes. **§423.13(1)(i); §423.16(g)91(i)**

And these...

- The 2015 rule's subcategory for EGUs less than 50MW nameplate capacity was not changed in the final rule and should still be applied where this threshold is met.
- 2015 rule VIP certifications are automatically rolled over. Thus, no NOPP is required on October 13, 2021, though depending on the information in the 2015 VIP certification the facility may need to supplement its filing. **§423.19(h)(5)**

Preliminary Decisions, Some May Change

Final Decisions, Implementation Underway

Ongoing:

Facility conducts scoping analysis and regular integrated resource plan analyses, pilot tests equipment, begins raising capital, seeks bids, may transfer under §423.13(o)

10/13/2021:

If a company believes it will participate in a subcategory or VIP, the company files a Notice of Planned Participation (NOPP)* with its permitting authority or control authority

12/31/2023:

High FGD flow plants and LUEGUs must meet applicable requirements; no further transfer into LUEGU subcategory under §423.13(o)

12/31/2025:

Compliance with generally applicable requirements; no further transfer between limitations is permitted under §423.13(o)

12/31/2028:

Compliance with VIP limits; final date to retire/repower

*Ongoing for those filing a NOPP:

- (1) File annual progress reports/certifications with the permitting authority or control authority.
- (2) File a notice of material delay, if necessary. §423.19(j)

EXHIBIT
CAD Cross 2
9-24-21



64650 Federal Register / Vol. 85, No. 198 / Tuesday, October 13, 2020 / Rules and Regulations

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 423

[EPA-HQ-OW-2009-0819; FRL-10014-41-OW]

RIN 2040-AF77

Steam Electric Reconsideration Rule

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA or the Agency) is finalizing a regulation to revise the technology-based effluent limitations guidelines and standards (ELGs) for the steam electric power generating point source category applicable to flue gas desulfurization (FGD) wastewater and bottom ash (BA) transport water. This final regulation is estimated to save approximately \$140 million annually in after tax compliance costs as a result of less costly FGD wastewater technologies that could be used with the modification of the Steam Electric Power Generating Effluent Guidelines 2015 rule (the 2015 rule) limitations; less costly BA transport water technologies made possible by the revision of the 2015 rule's zero discharge limitations; a two-year extension of compliance time frames for meeting FGD wastewater and BA transport water limitations, and additional subcategories for both FGD wastewater and BA transport water. Participation in the voluntary incentive program would contribute to the reduction in pollutant discharges by these steam electric power plants in FGD wastewater by approximately 26.7 million pounds per year.

DATES: This final rule is effective on December 14, 2020. In accordance with 40 CFR part 23, this regulation shall be considered issued for purposes of judicial review at 1:00 p.m. Eastern time on October 27, 2020. Under section 509(b)(1) of the CWA, judicial review of this regulation can be had only by filing a petition for review in the U.S. Court of Appeals within 120 days after the regulation is considered issued for purposes of judicial review. Under section 509(b)(2), the requirements in this regulation may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2009-0819. All documents in the docket are listed on the <http://www.regulations.gov> website.

Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: For technical information, contact Richard Benware, Engineering and Analysis Division, Telephone: 202-566-1369; Email: benware.richard@epa.gov. For economic information, contact James Covington, Engineering and Analysis Division, Telephone: 202-566-1034; Email: covington.james@epa.gov.

SUPPLEMENTARY INFORMATION:

Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, EPA defines terms and acronyms in Appendix A.

Supporting Documentation. Today's final rule is supported by numerous documents including:

- *Supplemental Technical Development Document for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (Supplemental TDD), Document No. EPA-821-R-20-001. The Supplemental TDD summarizes the technical and engineering analyses supporting the final rule. It presents EPA's updated analyses supporting the revisions to FGD wastewater and BA transport water. These updates include additional data collected since the signature of the 2015 rule, updates to the industry (e.g., retirements, updates to FGD treatment and BA handling), cost methodologies, pollutant removal estimates, corresponding non-water quality environmental impacts associated with updated FGD and BA methodologies, and explanations of the calculations of the effluent limitations and standards. Except for the updates described in the Supplemental TDD, the *Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (2015 TDD, Document No. EPA-821-R-15-007) is still applicable and provides a more complete summary of EPA's data collection, description of the industry, and underlying analyses supporting the ELGs established for other wastestreams in the 2015 rule.

- *Supplemental Environmental Assessment for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (Supplemental EA), Document No. EPA-821-R-20-002. The Supplemental EA summarizes the potential environmental and human health impacts that are estimated to result from implementation of this final rule.

- *Benefit and Cost Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (BCA Report), Document No. EPA-821-R-20-003. The BCA Report summarizes estimates of the societal benefits and costs resulting from implementation of this final rule.

- *Regulatory Impact Analysis for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* (RIA), Document No. EPA-821-R-20-004. The RIA presents a profile of the steam electric power generating industry, a summary of estimated costs and impacts associated with this final rule, and an assessment of the potential impacts on employment and small businesses.

- *Response to Public Comments for Revisions to the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category.* This document provides EPA's responses to substantive public comments received on the 2019 proposed rule.

- *Docket Index for the Revisions to the Steam Electric ELGs.* This document provides a list of the additional memoranda, references, and other information relied upon by EPA for this final rule.

Organization of this Document. The information in this preamble is organized as follows:

- I. Executive Summary
- II. Public Comments and Online Public Hearing
- III. General Information
 - A. Does this action apply to me?
 - B. What action is EPA taking?
 - C. What is EPA's authority for taking this action?
 - D. What are the monetized incremental costs and benefits of this action?
- IV. Background
 - A. Clean Water Act (CWA)
 - B. Relevant Effluent Guidelines
 1. Best Practicable Control Technology Currently Available (BPT)
 2. Best Available Technology Economically Achievable (BAT)
 3. Pretreatment Standards for Existing Sources (PSES)
 - C. 2015 Steam Electric Power Generation Point Source Category Rule

- D. Legal Challenges, Administrative Petitions, Section 705 Action, Postponement Rule, and Reconsideration of Certain Limitations and Standards
- E. Other Ongoing Rules Affecting the Steam Electric Sector
 - 1. Affordable Clean Energy (ACE) Rule
 - 2. Coal Combustion Residuals (CCR)
 - F. Scope of the Final Rule
- V. Steam Electric Power Generating Industry Description
 - A. General Description of Industry
 - B. Current Market Conditions in the Electricity Generation Sector
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 - 1. Engineering Site Visits
 - 2. Data Requests, Responses, and Meetings
 - 3. Voluntary BA Transport Water Sampling
 - 4. Electric Power Research Institute (EPRI) Voluntary Submission
 - 5. Meetings With Trade Associations
 - B. Information From the Drinking Water Utility Industry and States
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 - B. Executive Order 13771 (Reducing Regulation and Controlling Regulatory Costs)
 - C. Paperwork Reduction Act
 - D. Regulatory Flexibility Act
 - E. Unfunded Mandates Reform Act
 - F. Executive Order 13132: Federalism
 - G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

- H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
 - I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
 - J. National Technology Transfer and Advancement Act
 - K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations
 - L. Congressional Review Act (CRA)
- Appendix A to the Preamble: Definitions, Acronyms, and Abbreviations Used in This Preamble

I. Executive Summary

A. Purpose of Rule

Coal-fired plants are affected by several environmental regulations. One of these regulations, the Steam Electric Power Generating ELGs, was promulgated in 2015 (80 FR 67838; November 3, 2015) and applies to the subset of the electric power industry in which “generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam-water system as the thermodynamic medium” (40 CFR 423.10). The 2015 rule addressed discharges from FGD wastewater, fly ash (FA) transport water, BA transport water, flue gas mercury control wastewater, gasification wastewater, combustion residual leachate, and non-chemical metal cleaning wastes.

Since the Steam Electric Power Generating ELGs were revised in 2015, steam electric power plants have installed more affordable technologies that can remove similar amounts of pollution as those operating in 2015. This final rule revises limitations and standards for two of the wastestreams addressed in the 2015 rule: BA transport water and FGD wastewater. Today’s rule does not revise the other wastestreams covered by the 2015 rule.

B. Summary of Final Rule

For existing sources that discharge directly to surface water, with the subcategories discussed below excepted, the final rule establishes the following effluent limitations based on Best Available Technology Economically Achievable (BAT):

- For FGD wastewater, the final rule establishes numeric BAT effluent limitations on mercury, arsenic,

(B) The total volume that may be discharged for the above activities shall be reduced or eliminated to the extent achievable using control measures (including best management practices) that are technologically available and economically achievable in light of best industry practice. The total volume of the discharge authorized in this subsection shall be determined on a case-by-case basis by the permitting authority and in no event shall such discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume. The volume of daily discharges used to calculate the 30-day rolling average shall be calculated using measurements from flow monitors.

(ii) For any electric generating unit with a total nameplate generating capacity of less than or equal to 50 megawatts, that is an oil-fired unit, or for which the owner has certified to the permitting authority that it will cease combustion of coal pursuant to § 423.19(f), the quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of the applicable wastewater times the concentration for TSS listed in § 423.12(b)(4).

(iii) For bottom ash transport water generated by a low utilization electric generating unit, the quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of the applicable wastewater times the concentration for TSS listed in § 423.12(b)(4), and shall incorporate the elements of a best management practices plan as described in (k)(3) of this section.

(3) Where required in paragraph (k)(2)(iii) of this section, the discharger shall prepare, implement, review, and update a best management practices plan for the recycle of bottom ash transport water, and must include:

(i) Identification of the low utilization coal-fired generating units that contribute bottom ash to the bottom ash transport system.

(ii) A description of the existing bottom ash handling system and a list of system components (e.g., remote mechanical drag system, tanks, impoundments, chemical addition). Where multiple generating units share a bottom ash transport system, the plan shall specify which components are associated with low utilization generating units.

(iii) A detailed water balance, based on measurements, or estimates where measurements are not feasible, specifying the volume and frequency of

water additions and removals from the bottom ash transport system, including:

(A) Water removed from the BA transport system:

- (1) To the discharge outfall.
- (2) To the FGD scrubber system.
- (3) Through evaporation
- (4) Entrained with any removed ash
- (5) To any other mechanisms not specified above.

(B) Water entering or recycled to the BA transport system:

- (1) Makeup water added to the BA transport water system.
- (2) Bottom ash transport water recycled back to the system in lieu of makeup water.
- (3) Any other mechanisms not specified above.
- (iv) Measures to be employed by all facilities:

(A) Implementation of a comprehensive preventive maintenance program to identify, repair and replace equipment prior to failures that result in the release of bottom ash transport water.

(B) Daily or more frequent inspections of the entire bottom ash transport water system, including valves, pipe flanges and piping, to identify leaks, spills and other unintended bottom ash transport water escaping from the system, and timely repair of such conditions.

(C) Documentation of preventive and corrective maintenance performed.

(v) Evaluation of options and feasibility, accounting for the associated costs, for eliminating or minimizing discharges of bottom ash transport water, including:

(A) Segregation of bottom ash transport water from other process water.

(B) Minimization of the introduction of stormwater by diverting (e.g., curbing, using covers) storm water to a segregated collection system.

(C) Recycling bottom ash transport water back to the bottom ash transport water system.

(D) Recycling bottom ash transport water for use in the FGD scrubber.

(E) Optimization of existing equipment (e.g., pumps, pipes, tanks) and installing new equipment where practicable to achieve the maximum amount of recycle.

(F) Utilization of "in-line" treatment of transport water (e.g., pH control, fines removal) where needed to facilitate recycle.

(vi) Description of the bottom ash recycle system, including all technologies, measures, and practices that will be used to minimize discharge.

(vii) A schedule showing the sequence of implementing any changes necessary to achieve the minimized

discharge of bottom ash transport water, including the following:

(A) The anticipated initiation and completion dates of construction and installation associated with the technology components or process modifications specified in the plan.

(B) The anticipated dates that the discharger expects the technologies and process modifications to be fully implemented on a full-scale basis, which in no case shall be later than December 31, 2023.

(C) The anticipated change in discharge volume and effluent quality associated with implementation of the plan.

(viii) Description establishing a method for documenting and demonstrating to the permitting/control authority that the recycle system is well operated and maintained.

(ix) Performance of weekly flow monitoring for the following:

(A) Make up water to the bottom ash transport water system.

(B) Bottom ash transport water sluice flow rate (e.g., to the surface impoundment(s), dewatering bins(s), tank(s), remote mechanical drag system).

(C) Bottom ash transport water discharge to surface water or POTW.

(D) Bottom ash transport water recycle back to the bottom ash system or FGD scrubber.

* * * * *

(o)(1) Transfer between applicable limitations in a permit. Where, in the permit, the permitting authority has included alternative limits subject to eligibility requirements, upon timely notification to the permitting authority under § 423.19(i), a facility can become subject to the alternative limits under the following circumstances:

(i) On or before December 31, 2023 a facility may convert:

(A) From limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) or (k)(2)(ii) of this section to limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section; or

(B) From voluntary incentives program limitations under paragraph (g)(3)(i) of this section or generally applicable limitations under paragraph (k)(1)(i) of this section to limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section.

(ii) On or before December 31, 2025 a facility may convert

(A) From voluntary incentives program limitations under paragraph (g)(3)(i) of this section to limitations for

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electric generating units permanently ceasing coal combustion under paragraph (g)(2)(i) of this section; or
 (B) From limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) or (k)(2)(ii) of this section to voluntary incentives program limitations under paragraphs (g)(3)(i) of this section or generally applicable limitations under (k)(1)(i) of this section; or
 (C) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to generally applicable limitations under paragraphs (g)(1)(i) or (k)(1)(i) of this section; or
 (D) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to voluntary incentives program limitations under paragraphs (g)(3)(i) of this section or generally

applicable limitations under paragraph (k)(1)(i) of this section; or
 (E) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) and (k)(2)(ii) of this section.
 (2) A facility must be in compliance with all of its currently applicable requirements to be eligible to file a notice under § 423.19(i) and to become subject to a different set of applicable requirements under paragraph (o)(1) of this section.
 (3) Where a facility seeking a transfer under paragraph (o)(1)(ii) of this section is currently subject to more stringent limitations than the limitations being sought, the facility must continue to meet those more stringent limitations.
 2. Amend § 423.16 by revising paragraphs (e) and (g) to read as follows:

§ 423.16 Pretreatment standards for existing sources (PSES).
 * * * * *

(e)(1) *FGD wastewater.* Except as provided for in paragraph (e)(2) of this section, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, and that the owner has not certified to the permitting authority that it will cease the coal combustion pursuant to § 423.19(f), the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in table 3 to this paragraph (e)(1). Dischargers must meet the standards in this paragraph by October 13, 2023 except as provided for in paragraph (e)(2) of this section. These standards apply to the discharge of FGD wastewater generated on and after October 13, 2023.

TABLE 3 TO PARAGRAPH (e)(1)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (ug/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

(2)(i) For FGD wastewater discharges from a low utilization electric generating unit, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table 4 to paragraph (e)(2)(ii).

Dischargers must meet the standards in this paragraph by October 13, 2023.
 (ii) If any low utilization electric generating unit fails to timely recertify that the two year average capacity utilization rating of such a electric generating unit is below 10 percent per year as specified in § 423.19(e), regardless of the reason, within two

years from the date such a recertification was required, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the Table 3 to paragraph (e)(1).

TABLE 4 TO PARAGRAPH (e)(2)(ii)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

* * * * *
 (g)(1) Except for those discharges to which paragraph (g)(2) applies, or when the bottom ash transport water is used in the FGD scrubber, for any electric

generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, that is not a low utilization electric generating unit, and that the owner has

not certified to the permitting authority that the electric generating unit will cease the cessation of coal combustion pursuant to § 423.19(f), there shall be no discharge of pollutants in bottom ash

transport water. This standard applies to the discharge of bottom ash transport water generated on and after October 13, 2023. Except for those discharges to which paragraph (g)(2) of this section applies, whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge standard in this paragraph. When the bottom ash transport water is used in the FGD scrubber, the quantity of pollutants in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of bottom ash transport water times the concentration listed in the table in paragraph (e) of this section.

(2)(i) The discharge of pollutants in bottom ash transport water from a properly installed, operated, and maintained bottom ash system is authorized under the following conditions:

(A) To maintain system water balance when precipitation-related inflows are generated from a 10-year storm event of 24-hour or longer duration (e.g., 30-day storm event) and cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment; or

(B) To maintain system water balance when regular inflows from wastestreams other than bottom ash transport water exceed the ability of the bottom ash system to accept recycled water and segregating these other wastestreams is feasible; or

(C) To maintain system water chemistry where current operations at the facility are unable to currently manage pH, corrosive substances, substances or conditions causing scaling, or fine particulates to below levels which impact system operation or maintenance; or

(D) To conduct maintenance not otherwise included in paragraphs (g)(2)(i)(A)(1), (2), or (3) of this section and not exempted from the definition of transport water in § 423.11(p), and when water volumes cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment.

(ii) The total volume that may be discharged to a POTW for the above activities shall be reduced or eliminated to the extent achievable as determined by the control authority. The control authority may also include control measures (including best management practices) that are technologically available and economically achievable in light of best industry practice. In no event shall the total volume of the

discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume. The volume of daily discharges used to calculate the 30-day rolling average shall be calculated using measurements from flow monitors.

(iii) For bottom ash transport water generated by a low utilization electric generating unit, the quantity of pollutants discharged in bottom ash transport water shall incorporate the elements of a best management practices plan as described in § 423.13(k)(3).

■ 5. Add § 423.18 to read as follows.

§ 423.18 Permit conditions.

All permits subject to this part shall include the following permit conditions:

(a) An electric generating unit shall qualify as a low utilization electric generating unit or permanently ceasing the combustion of coal by December 31, 2028, if such qualification would have been demonstrated absent the following qualifying event:

(1) An emergency order issued by the Department of Energy under Section 202(c) of the Federal Power Act,

(2) A reliability must run agreement issued by a Public Utility Commission, or

(3) Any other reliability-related order or agreement issued by a competent electricity regulator (e.g., an independent system operator) which results in that electric generating unit operating in a way not contemplated when the certification was made; or

(4) The operation of the electric generating unit was necessary for load balancing in an area subject to a declaration under 42 U.S.C. 5121 *et seq.*, that there exists:

(i) An "Emergency," or
(ii) A "Major Disaster," and
(iii) That load balancing was due to the event that caused the "Emergency" or "Major Disaster" in paragraph (a)(4) of this section to be declared,

(b) Any facility providing the required documentation pursuant to § 423.19(g) may avail itself of the protections of this permit condition.

■ 6. Add § 423.19 to read as follows.

§ 423.19 Reporting and recordkeeping requirements.

(a) Discharges subject to this part must comply with the following additional reporting requirements.

(b) Signature and certification. Unless otherwise provided below, all certifications and recertifications required in this part must be signed and certified pursuant to 40 CFR 122.22 for direct dischargers or 40 CFR 403.12(l) for indirect dischargers.

(c) Requirements for facilities discharging bottom ash transport water

pursuant to § 423.13(k)(2)(i) or 423.16(g)(2)(i).

(1) Initial Certification Statement. For sources seeking to discharge bottom ash transport water pursuant to § 423.13(k)(2)(i) or 423.16(g)(2)(i), an initial certification shall be submitted to the permitting authority by the as soon as possible date determined under § 423.11(t), or the control authority by October 13, 2023 in the case of an indirect discharger.

(2) Signature and certification. The certification statement must be signed and certified by a professional engineer.

(3) Contents. An initial certification shall include the following:

(A) A statement that the professional engineer is a licensed professional engineer.

(B) A statement that the professional engineer is familiar with the regulation requirements.

(C) A statement that the professional engineer is familiar with the facility.

(D) The primary active wetted bottom ash system volume in § 423.11(aa).

(E) Material assumptions, information, and calculations used by the certifying professional engineer to determine the primary active wetted bottom ash system volume.

(F) A list of all potential discharges under § 423.13(k)(2)(i)(A)(1) through (4) or § 423.16(g)(2)(i)(A) through (D), the expected volume of each discharge, and the expected frequency of each discharge.

(G) Material assumptions, information, and calculations used by the certifying professional engineer to determine the expected volume and frequency of each discharge including a narrative discussion of why such water cannot be managed within the system and must be discharged.

(H) A list of all wastewater treatment systems at the facility currently, or otherwise required by a date certain under this section.

(I) A narrative discussion of each treatment system including the system type, design capacity, and current or expected operation.

(d) Requirements for a bottom ash best management practices plan.

(1) *Initial and annual certification statement.* For sources required to develop and implement a best management practices plan pursuant to § 423.13(k)(3), an initial certification shall be made to the permitting authority with a permit application or within two years of October 13, 2021, whichever is later, or to the control authority no later than October 13, 2023 in the case of an indirect discharger, and an annual recertification shall be made to the permitting authority, or control

authority in the case of an indirect discharger, within 60 days of the anniversary of the original plan.

(2) *Signature and certification.* The certification statement must be signed and certified by a professional engineer.

(3) *Contents for initial certification.* An initial certification shall include the following:

(A) A statement that the professional engineer is a licensed professional engineer.

(B) A statement that the professional engineer is familiar with the regulation requirements.

(C) A statement that the professional engineer is familiar with the facility.

(D) The best management practices plan.

(E) A statement that the best management practices plan is being implemented.

(4) *Additional contents for annual certification.* In addition to the required contents of the initial certification in paragraph (c)(3) of this section an annual certification shall include the following:

(A) Any updates to the best management practices plan.

(B) An attachment of weekly flow measurements from the previous year.

(C) The average amount of recycled bottom ash transport water in gallons per day.

(D) Copies of inspection reports and a summary of preventative maintenance performed on the system.

(E) A statement that the plan and corresponding flow records are being maintained at the office of the plant.

(f) Requirements for low utilization electric generating units.

(1) *Notice of Planned Participation.* For sources seeking to qualify as a low utilization electric generating unit, a Notice of Planned Participation shall be submitted to the permitting authority or control authority no later than October 13, 2021.

(2) *Contents.* A Notice of Planned Participation shall identify the potential low utilization electric generating unit. The notice shall also include a statement of at least two years' capacity utilization rating data for the most recent two years of operation of each low utilization electric generating unit and a statement that the facility has a good faith belief that each low utilization electric generating unit will continue to operate at the required capacity utilization rating. Where the most recent capacity utilization rating does not meet the low utilization electric generating unit requirement, a discussion of the projected future utilization shall be provided, including material data and assumptions used to make that projection.

(3) *Initial and annual certification statement.* For sources seeking to qualify as a low utilization electric generating unit under this part, an initial certification shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than December 31, 2023, and an annual recertification shall be made to the permitting authority, or control authority in the case of an indirect discharger, within 60 days of submitting annual electricity production data to the Energy Information Administration.

(4) *Contents.* A certification or annual recertification shall be based on the information submitted to the Energy Information Administration and shall include copies of the underlying forms submitted to the Energy Information Administration, as well as any supplemental information and calculations used to determine the two year average annual capacity utilization rating.

(f) Requirements for units that will achieve permanent cessation of coal combustion by December 31, 2028.

(1) *Notice of Planned Participation.* For sources seeking to qualify as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, under this part, a Notice of Planned Participation shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than October 13, 2021.

(2) *Contents.* A Notice of Planned Participation shall identify the electric generating units intended to achieve the permanent cessation of coal combustion. A Notice of Planned Participation shall include the expected date that each electric generating unit is projected to achieve permanent cessation of coal combustion, whether each date represents a retirement or a fuel conversion, whether each retirement or fuel conversion has been approved by a regulatory body, and what the relevant regulatory body is. The Notice of Planned Participation shall also include a copy of the most recent integrated resource plan for which the applicable state agency approved the retirement or repowering of the unit subject to the ELGs, certification of electric generating unit cessation under 40 CFR 257.103(b), or other documentation supporting that the electric generating unit will permanently cease the combustion of coal by December 31, 2028. The Notice of Planned Participation shall also include, for each such electric generating unit, a timeline to achieve the permanent cessation of coal

combustion. Each timeline shall include interim milestones and the projected dates of completion.

(3) *Annual Progress Report.* Annually after submission of the Notice of Planned Participation in paragraph (f)(1) of this section, a progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.

(4) *Contents.* An Annual Progress Report shall detail the completion of any interim milestones listed in the Notice of Planned Participation since the previous progress report, provide a narrative discussion of any completed, missed, or delayed milestones, and provide updated milestones.

(g) Requirements for facilities seeking the protections of § 423.18.

(1) *Certification statement.* For sources seeking to apply the protections of the permit conditions in paragraph § 423.18, and for each instance that § 423.18 is applied, a one-time certification shall be submitted to the permitting authority, or control authority in the case of an indirect discharger, no later than:

(A) In the case of an order or agreement under § 423.18(a)(1), 30 days from receipt of the order or agreement attached pursuant to paragraph (g)(2)(B) of this section; or

(B) In the case of an "Emergency" or "Major Disaster" under § 423.18(a)(2), 30 days from the date that a load balancing need arose.

(2) *Contents.* A certification statement must include the following:

(A) The qualifying event from the list in § 423.18(a), the individual or entity that issued or triggered the event, and the date that such an event was issued or triggered.

(B) A copy of any documentation of the qualifying event from the individual or entity listed under paragraph (g)(2)(A) of this section, or, where such documentation does not exist, other documentation with indicia of reliability for the permitting authority to confirm the qualifying event.

(C) An analysis and accompanying narrative discussion which demonstrates that a electric generating unit would have qualified for the subcategory at issue absent the event detailed in paragraph (g)(2)(A), including the material data, assumptions, and methods used.

(3) *Termination of need statement.* For sources filing a certification statement under paragraph (g)(1) above, and for each such certification statement, a one-time termination of need statement shall be submitted to the permitting authority, or control authority in the case of an indirect

discharger, no later than 30 days from when the source is no longer subject to increased production from the qualifying event.

(4) *Contents.* A termination of need statement must include a narrative discussion including the date the qualifying event terminated, or if it has not terminated, why the source believes the capacity utilization will no longer be elevated to a level requiring the protection of § 423.18.

(h) Requirements for facilities voluntarily meeting the limits in § 423.13(g)(3)(i).

(1) *Notice of Planned Participation.* For sources opting to comply with the Voluntary Incentives Program requirements of section 423.13(g)(3)(i) by December 31, 2028, a Notice of Planned Participation shall be made to the permitting authority no later than October 13, 2021.

(2) *Contents.* A Notice of Planned Participation shall identify the facility opting to comply with the Voluntary Incentives Program requirements of 423.13(g)(3)(i), specify what technology or technologies are projected to be used to comply with those requirements, and provide a detailed engineering dependency chart and accompanying narrative demonstrating when and how the system(s) and any accompanying disposal requirements will be achieved by December 31, 2028.

(3) *Annual progress report.* After submission of the Notice of Planned Participation in paragraph (h)(1), a

progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.

(4) *Contents.* An Annual Progress Report shall detail the completion of interim milestones presented in the engineering dependency chart from the Notice of Planned Participation since the previous progress report, provide a narrative discussion of completed, missed, or delayed milestones, and provide updated milestones.

(5) *Rollover certification.* Where, prior to the effective date, a discharger has already provided a notice to the permitting authority of opting to comply with the Voluntary Incentives Program requirements of § 423.13(g)(i), such notice will satisfy paragraph (h)(1) of this section. However, where details required by (h)(2) of this section were missing from the previously provided notice, those details must be provided in the first Annual Progress Report, no later than October 13, 2021.

(i) Requirements for facilities seeking to transfer between applicable limitations in a permit under § 423.13(o).

(1) *Notice of Planned Participation.* For sources which have filed a Notice of Planned Participation under paragraphs (e)(1), (f)(1), or (h)(1) of this section and intend to make changes that would qualify them for a different set of requirements under § 423.13(o), a Notice of Planned Participation shall be made

to the permitting authority, or to the control authority in the case of an indirect discharger, no later than the dates stated in § 423.13(o)(1).

(2) *Contents.* A Notice of Planned Participation shall include a list of the electric generating units for which the source intends to change compliance alternatives. For each such electric generating unit, the notice shall list the specific provision under which this transfer will occur, the reason such a transfer is warranted, and a narrative discussion demonstrating that each electric generating unit will be able to maintain compliance with the relevant provisions.

(j) *Notice of material delay.* (1) *Notice.* Within 30 days of experiencing a material delay in the milestones set forth in paragraphs (f)(2) or (h)(2) of this section and where such a delay may preclude permanent cessation of coal combustion or compliance with the voluntary incentives program limitations by December 31, 2028, a facility shall file a notice of material delay with the permitting authority, or control authority in the case of an indirect discharger.

(2) *Contents.* The contents of such a notice shall include the reason for the delay, the projected length of the delay, and a proposed resolution to maintain compliance.

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Mitchell CCR and ELG Project Cost Estimate

Unit & Scope	Pre-2020	2020	2021	2022	2023	2024	Total
ML1-2 Dry Ash Handling Capital	\$ 341	\$ 2,980	\$ 4,870	\$ 12,075	\$ 36,351	\$ -	\$ 56,616
MLO FGD WWT Capital	\$ -	\$ 413	\$ 7,092	\$ 15,877	\$ 24,448	\$ 982	\$ 48,811
MLO Pond Repurpose Capital	\$ -	\$ 343	\$ 4,838	\$ 8,930	\$ 11,980	\$ -	\$ 26,091
MLO Pond Repurpose Other	\$ -	\$ -	\$ 182	\$ 941	\$ 711	\$ -	\$ 1,834
MLO Pond Repurpose ARO	\$ -	\$ -	\$ 17	\$ 85	\$ 64	\$ -	\$ 166
Total (Direct+Allocations)	\$ 341	\$ 3,736	\$ 16,999	\$ 37,907	\$ 73,554	\$ 982	\$ 133,519

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Amos CCR Only Project Cost Estimate

Plant & Scope	2020	2021	2022	2023	2029	2030	Total
AM CCR Only Capital	\$ 3,120	\$ 20,860	\$ 15,120	\$ 13,040	\$ -	\$ -	\$ 52,140
AM CCR Only Other	\$ 725	\$ 489	\$ 2,510	\$ -	\$ -	\$ -	\$ 3,724
AM CCR Only ARO	\$ -	\$ -	\$ -	\$ -	\$ 5,901	\$ 10,954	\$ 16,855
Total (Direct+Allocations)	\$ 3,845	\$ 21,349	\$ 17,630	\$ 13,040	\$ 5,901	\$ 10,954	\$ 72,719

Amos CCR and ELG Project Cost Estimate

Unit & Scope	2020	2021	2022	2023	2024	Total
AM1-3 Dry Ash Handling Capital	\$ 1,694	\$ 24,707	\$ 44,435	\$ 2,443	\$ -	\$ 73,278
AM0 FGD WWT Capital	\$ 818	\$ 8,630	\$ 35,459	\$ 13,889	\$ -	\$ 58,796
AM0 Pond Repurpose Capital	\$ 1,711	\$ 7,218	\$ 17,701	\$ 11,228	\$ -	\$ 37,858
AM0 Pond Repurpose Other	\$ -	\$ 519	\$ 346	\$ -	\$ -	\$ 866
AM0 Pond Repurpose ARO	\$ -	\$ 73	\$ 49	\$ -	\$ -	\$ 122
AM0 Pond Closure Other	\$ -	\$ -	\$ -	\$ 1,796	\$ -	\$ 1,796
AM0 Pond Closure ARO	\$ -	\$ -	\$ -	\$ 253	\$ 4,161	\$ 4,414
Total (Direct+Allocations)	\$ 4,223	\$ 41,147	\$ 97,990	\$ 29,609	\$ 4,161	\$ 177,130

Mountaineer CCR and ELG Project Cost Estimate

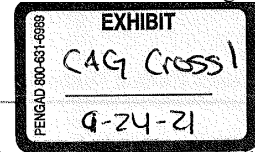
Unit & Scope	2020	2021	2022	2023	Total
MT1 Dry Ash Handling Capital	\$ 3,046	\$ 13,483	\$ 19,933	\$ 66	\$ 36,528
MT1 FGD WWT Capital	\$ 848	\$ 1,401	\$ 4,833	\$ 445	\$ 7,528
MT1 Pond Repurpose Capital	\$ 1,829	\$ 2,247	\$ 13,325	\$ 8,640	\$ 26,042
MT1 Pond Repurpose Other	\$ -	\$ -	\$ 1,177	\$ 1,177	\$ 2,354
MT1 Pond Repurpose ARC	\$ -	\$ -	\$ 217	\$ 217	\$ 434
Total (Direct+Allocations)	\$ 5,723	\$ 17,131	\$ 39,484	\$ 10,546	\$ 72,885

Mountaineer CCR Only Project Cost Estimate

Plant & Scope	2020	2021	2022	2023	2029	2030	Total
MT CCR Only Capital	\$ 3,270	\$ 1,930	\$ 7,120	\$ 6,930	\$ -	\$ -	\$ 19,250
MT CCR Only Other	\$ -	\$ -	\$ 1,714	\$ 1,714	\$ -	\$ -	\$ 3,427
MT CCR Only ARO	\$ -	\$ -	\$ -	\$ -	\$ 10,315	\$ 19,152	\$ 29,467
Total (Direct+Allocations)	\$ 3,270	\$ 1,930	\$ 8,834	\$ 8,644	\$ 10,315	\$ 19,152	\$ 52,144

Mitchell CCR Only Project Cost Estimate

Plant & Scope	2020	2021	2022	2023	2029	2030	Total
ML CCR Only Capital	\$ 2,520	\$ 5,040	\$ 10,080	\$ 7,560	\$ -	\$ -	\$ 25,200
ML CCR Only Other	\$ -	\$ 660	\$ 987	\$ 739	\$ -	\$ -	\$ 2,386
ML CCR Only ARO	\$ -	\$ -	\$ -	\$ -	\$ 3,002	\$ 4,502	\$ 7,504
Total (Direct+Allocations)	\$ 2,520	\$ 5,700	\$ 11,067	\$ 8,299	\$ 3,002	\$ 4,502	\$ 35,090



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frame for all plants to make decisions and achieve compliance with the generally applicable limitations, whether they initially start in another subcategory or not.

Consistent with the CCR Part A final rule requirements, a plant seeking to transfer between the ELG rule provisions must demonstrate compliance with all requirements of both the provision transferred from and the provision transferred to, and continue to meet requirements that were applicable if that applicability date has passed. This ensures that a plant does not miss or circumvent otherwise applicable deadlines or cease operating equipment already installed, operated, and maintained to comply with deadlines that have passed.

The first objective addresses, for example, a plant converting from the permanent cessation of coal combustion subcategory with deadlines of 2028, to the LUEGU subcategory, with deadlines no later than 2023. EPA does not want a plant to miss or circumvent the latest LUEGU compliance dates of December 31, 2023, because the plant initially *64709 intends to meet the 2028 requirements and later changes its mind. Such a scenario could, for example, result in the plant failing to meet the 2023 LUEGU requirements for five years between 2023 and 2028.

The second objective would mean that, for example, where a plant is already implementing a BMP plan for BA transport water under the LUEGU subcategory and then decided to convert to the subcategory for permanent cessation of coal combustion, the plant would continue to implement the BMP plan until such cessation occurs. This ensures that technology-based requirements that were applicable would continue to be met, furthering the goals of eliminating discharges to the extent technologically available and achievable under section 301(b) of the CWA.

This new set of provisions is also appropriate as a practical matter to implement the subcategories as finalized. While EPA proposed for plants to certify to a subcategory immediately, based on public comments. EPA has finalized provisions allowing plants to file an initial notice of planned participation such that the plant could certify differently within the compliance time frame. In many cases, a plant may require local or state regulatory approval prior to reducing its utilization or planning to retire. These changes in the final rule allow plants to notify their permitting authority of their intent to participate in a subcategory, but also allows time to obtain local or state approval, if necessary, before the compliance deadline. By allowing automatic transfer between alternatives, the final rule also avoids unnecessarily burdensome permit modifications that can further extend timelines to make plant changes, including equipment upgrades.

Finally, the Agency notes that with later dates for certification and the ability to transfer between alternative limitations for a period of time, there is no longer a need for tiered limitations in the LUEGU subcategory. Thus, the proposed tiering of limitations are not being finalized.

5. Addressing Unexpected Changes in Generation

Since the 2015 rule, EPA has learned of several instances when plants have withdrawn or delayed retirement announcements for coal-fired EGUs and plants. These instances can be grouped into two categories. First, some delays were involuntary, resulting from orders issued by the Department of Energy (DOE) or Public Utility Commissions (PUCs). The remaining announcements were withdrawn or delayed voluntarily due to changed circumstances. While both the voluntary and involuntary changes to announced retirements were infrequent, EPA acknowledges that such changes will necessarily impact a plant's status with regard to some of the subcategories in the final rule. These situations are discussed below. For further information on announced retirements, see DCN SE07207.

a. Involuntary Retirement Delays

At least five plants with announced retirement dates had those dates involuntarily delayed as a result of the DOE issuing orders under Section 202(c) of the Federal Power Act, or a PUC issuing a reliability must-run agreement. Such involuntary operations have raised questions about the conflict between legal obligations to produce electricity and legal obligations under environmental statutes.[FN167] Today's final rule would subcategorize LUEGUs and EGUs permanently ceasing coal

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Unlike other subcategories, which often require that a plant possess some static characteristic (e.g., less than 50 MW nameplate capacity), the low utilization subcategory is based on the fluctuating CUR. Thus, EPA is clarifying how permitting authorities can determine whether a plant qualifies for this subcategory.

If a plant seeks to have the limitations from this subcategory applied to discharges from one or more EGUs, the plant needs to provide the permitting authority its calculation of the average of the most recent two calendar years of CUR for the subject EGU(s). EPA received some comments that plants should be allowed to certify to future low utilization operations, even where current operations are not low utilization. Other comments stated that additional reporting and recordkeeping should be required to prevent abuse. EPA agrees with both comments. It was not the Agency's intent for plants on a downward utilization trajectory to be barred from the LUEGU subcategory, where current operations exceed the required less than 10 percent CUR threshold. Thus, the NPDES permitting authority should refrain from establishing a "no later than date" that would restrict a plant from demonstrating two years of reduced CUR. However, NPDES permitting authorities also need to know when to provide flexibility and when to dutifully set a compliance date which is "as soon as possible." Thus, EPA is requiring in the rule that a plant seeking to qualify for this subcategory must file a Notice of Planned Participation (NOPP) by October 13, 2021, even if it would not yet qualify, and must operate below this threshold before the latest compliance dates of December 31, 2023. Upon receipt of a NOPP, the NPDES permitting authority can properly consider that NOPP in the "other factors" of 40 CFR 423.11(t)(4).

Once a plant reaches the "as soon as possible" date determined by the permitting authority, it must thereafter provide annual certifications of its 24-month average CUR. This average should primarily be calculated using data developed for reporting to the EIA, since MWh production information already collected for the EIA will both eliminate the potentially unnecessary paperwork burden of a separate calculations and information gathering and allow the NPDES permitting authority to verify the accuracy of the reported values more easily. The use of a two-year average will ensure that a low utilization EGU responding to a single extreme demand event in one year (e.g., unexpectedly high peak demand in summer or winter) can still qualify for this subcategory if its average CUR over the two years remains below 10 percent. Furthermore, the plant must annually provide the permitting authority an updated two-year average CUR for each subcategorized EGU within 60 days of submitting production information to the EIA to ensure that it remains an LUEGU.

4. Transitioning Between Limitations

EPA received a significant number of comments that it should harmonize the CCR and ELG rules to the extent practicable. As discussed above, EPA agrees that such harmonization is important. One major set of features EPA attempted to harmonize this final rule with are the alternative closure provisions of Paragraphs 257.103(f)(1) and (f)(2) of the CCR rule. In response to comments on the CCR Part A Proposed Rule (one of which, the USWAG comment, was incorporated by reference into a public comment submitted for this ELG rule), EPA added a provision to the final CCR Part A Rule that provides for transfer between these paragraphs. A plant that had applied for a site-specific alternative closure extension to extend its cease receipt of waste date under paragraph 257.103(f)(1) could, for example, now transfer into the provision that requires permanent cessation of a coal-fired EGU under paragraph 257.103(f)(2). Similarly, EPA has discussed transfer between ELG subcategories with electric utilities. Thus, to align with the flexibilities of the CCR Part A final rule and make implementation of this rule easier, EPA is finalizing provisions allowing for a plant with a permit to transfer between two subcategories, or between a subcategory and the VIP, without undergoing a permit modification.[FN166]

The EPA is also establishing deadlines by which such transfers must occur. Transfers into the LUEGU subcategory must occur no later than December 31, 2023, the latest date by which compliance dates for this subcategory would fall. For all other transfers, the EPA is selecting December 31, 2025 as the latest date for three reasons. First, the ability to transfer under Section 257.103 of the CCR Rule will terminate before this date, giving plants certainty as to their CCR compliance strategies. Thus, it is consistent with the CCR rule. Second, the first five-year permitting cycle will have ended, and EPA expects that plants subject to NPDES permitting under this rule will have determined their compliance path by then. Lastly, some of the provisions that can be transferred to in this rule include compliance dates for the generally applicable limitations of no later than December 31, 2025. In such cases, allowing transfer to such provisions at a later date could create disparities for compliance with these generally applicable limitations within the industry. Thus, a final transfer date of December 31, 2025, creates a consistent time

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frame for all plants to make decisions and achieve compliance with the generally applicable limitations, whether they initially start in another subcategory or not.

Consistent with the CCR Part A final rule requirements, a plant seeking to transfer between the ELG rule provisions must demonstrate compliance with all requirements of both the provision transferred from and the provision transferred to, and continue to meet requirements that were applicable if that applicability date has passed. This ensures that a plant does not miss or circumvent otherwise applicable deadlines or cease operating equipment already installed, operated, and maintained to comply with deadlines that have passed.

The first objective addresses, for example, a plant converting from the permanent cessation of coal combustion subcategory with deadlines of 2028, to the LUEGU subcategory, with deadlines no later than 2023. EPA does not want a plant to miss or circumvent the latest LUEGU compliance dates of December 31, 2023, because the plant initially *64709 intends to meet the 2028 requirements and later changes its mind. Such a scenario could, for example, result in the plant failing to meet the 2023 LUEGU requirements for five years between 2023 and 2028.

The second objective would mean that, for example, where a plant is already implementing a BMP plan for BA transport water under the LUEGU subcategory and then decided to convert to the subcategory for permanent cessation of coal combustion, the plant would continue to implement the BMP plan until such cessation occurs. This ensures that technology-based requirements that were applicable would continue to be met, furthering the goals of eliminating discharges to the extent technologically available and achievable under section 301(b) of the CWA.

This new set of provisions is also appropriate as a practical matter to implement the subcategories as finalized. While EPA proposed for plants to certify to a subcategory immediately, based on public comments. EPA has finalized provisions allowing plants to file an initial notice of planned participation such that the plant could certify differently within the compliance time frame. In many cases, a plant may require local or state regulatory approval prior to reducing its utilization or planning to retire. These changes in the final rule allow plants to notify their permitting authority of their intent to participate in a subcategory, but also allows time to obtain local or state approval, if necessary, before the compliance deadline. By allowing automatic transfer between alternatives, the final rule also avoids unnecessarily burdensome permit modifications that can further extend timelines to make plant changes, including equipment upgrades.

Finally, the Agency notes that with later dates for certification and the ability to transfer between alternative limitations for a period of time, there is no longer a need for tiered limitations in the LUEGU subcategory. Thus, the proposed tiering of limitations are not being finalized.

5. Addressing Unexpected Changes in Generation

Since the 2015 rule, EPA has learned of several instances when plants have withdrawn or delayed retirement announcements for coal-fired EGUs and plants. These instances can be grouped into two categories. First, some delays were involuntary, resulting from orders issued by the Department of Energy (DOE) or Public Utility Commissions (PUCs). The remaining announcements were withdrawn or delayed voluntarily due to changed circumstances. While both the voluntary and involuntary changes to announced retirements were infrequent, EPA acknowledges that such changes will necessarily impact a plant's status with regard to some of the subcategories in the final rule. These situations are discussed below. For further information on announced retirements, see DCN SE07207.

a. Involuntary Retirement Delays

At least five plants with announced retirement dates had those dates involuntarily delayed as a result of the DOE issuing orders under Section 202(c) of the Federal Power Act, or a PUC issuing a reliability must-run agreement. Such involuntary operations have raised questions about the conflict between legal obligations to produce electricity and legal obligations under environmental statutes.[FN167] Today's final rule would subcategorize LUEGUs and EGUs permanently ceasing coal

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Unlike other subcategories, which often require that a plant possess some static characteristic (e.g., less than 50 MW nameplate capacity), the low utilization subcategory is based on the fluctuating CUR. Thus, EPA is clarifying how permitting authorities can determine whether a plant qualifies for this subcategory.

If a plant seeks to have the limitations from this subcategory applied to discharges from one or more EGUs, the plant needs to provide the permitting authority its calculation of the average of the most recent two calendar years of CUR for the subject EGU(s). EPA received some comments that plants should be allowed to certify to future low utilization operations, even where current operations are not low utilization. Other comments stated that additional reporting and recordkeeping should be required to prevent abuse. EPA agrees with both comments. It was not the Agency's intent for plants on a downward utilization trajectory to be barred from the LUEGU subcategory, where current operations exceed the required less than 10 percent CUR threshold. Thus, the NPDES permitting authority should refrain from establishing a "no later than date" that would restrict a plant from demonstrating two years of reduced CUR. However, NPDES permitting authorities also need to know when to provide flexibility and when to dutifully set a compliance date which is "as soon as possible." Thus, EPA is requiring in the rule that a plant seeking to qualify for this subcategory must file a Notice of Planned Participation (NOPP) by October 13, 2021, even if it would not yet qualify, and must operate below this threshold before the latest compliance dates of December 31, 2023. Upon receipt of a NOPP, the NPDES permitting authority can properly consider that NOPP in the "other factors" of 40 CFR 423.11(t)(4).

Once a plant reaches the "as soon as possible" date determined by the permitting authority, it must thereafter provide annual certifications of its 24-month average CUR. This average should primarily be calculated using data developed for reporting to the EIA, since MWh production information already collected for the EIA will both eliminate the potentially unnecessary paperwork burden of a separate calculations and information gathering and allow the NPDES permitting authority to verify the accuracy of the reported values more easily. The use of a two-year average will ensure that a low utilization EGU responding to a single extreme demand event in one year (e.g., unexpectedly high peak demand in summer or winter) can still qualify for this subcategory if its average CUR over the two years remains below 10 percent. Furthermore, the plant must annually provide the permitting authority an updated two-year average CUR for each subcategorized EGU within 60 days of submitting production information to the EIA to ensure that it remains an LUEGU.

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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION OF THE)	CASE NO.
SERVICE, RATES AND FACILITIES OF)	2021-00370
KENTUCKY POWER COMPANY)	

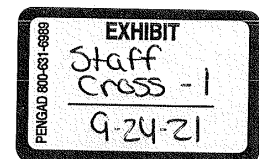
ORDER

The Commission, on its own motion, establishes this proceeding to conduct a formal investigation of the provision of service, rates and facilities of Kentucky Power Company (Kentucky Power).

Kentucky Power is a utility as defined in KRS 278.010 (3)(a). Pursuant to KRS 278.040(2), "[t]he jurisdiction of the commission shall extend to all utilities in this state," and "[t]he commission shall have exclusive jurisdiction over the regulations of rates and service of utilities." The Commission's regulation of rates and service, pursuant to KRS 278.030, ensures that utilities may only "demand, collect and receive fair, just and reasonable rates for service rendered," and that utilities "shall furnish adequate, efficient and reasonable service."¹ Furthermore, no utility may "begin the construction of any plant, equipment property or facility for furnishing"² any service regulated by the Commission until that utility obtains "a certificate that public convenience and necessity require the service or construction." The transfer of control of "any utility furnishing utility service in this state, without having first obtained the approval of the commission . . . shall be void

¹ KRS 278.020(1)(a).

² *Id.*



and of no effect.”³ Additionally, Kentucky law provides that “whenever it is necessary in the performance of its duties, the commission may investigate and examine the condition of any utility subject to its jurisdiction.”⁴ Finally, the Commission may make an investigation of a utility’s rates and service on its own motion.⁵

On September 3, 2020, Kentucky Power filed an application, pursuant to KRS 278.020(2) and 807 KAR 5:001, Section 15, for a Certificate of Public Convenience and Necessity (CPCN) to construct and retire certain transmission facilities in Pike and Floyd counties, Kentucky.⁶ In a December 29, 2020 Order granting the requested relief, the Commission expressed concern regarding Kentucky Power’s planning, operation, and control of its transmission system vis-à-vis its relationship with American Electric Power Company, Inc. (AEP) Kentucky Transmission Company, Inc. (Kentucky Transco). Specifically, the Commission noted, “It would appear from the record in this matter that Kentucky Power, on its own volition or at the direction of another, plans to continue systematically transferring ownership of its transmission system in a piecemeal fashion under the auspices of the system’s rehabilitation and replacement.”⁷ The Commission further expressed concern at “Kentucky Power’s indifference to the cost and risk attendant to transferring portions of its transmission system to affiliates in contravention

³ KRS 278.020(7).

⁴ KRS 278.250.

⁵ KRS 278.260.

⁶ Case No. 2020-00062, *Electronic Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line and Associated Facilities in Pike and Floyd Counties, Kentucky* (filed Sept. 3, 2020).

⁷ *Id.*, Order (Ky. PSC Dec. 29, 2020) at 27–28

of the spirit, if not the letter of the law.”⁸ Finally, in a subsequent Order on rehearing the Commission stated that Kentucky Power may not “permit Kentucky Transco to replace or upgrade any existing electric line and related appurtenances currently owned by Kentucky Power without prior Commission approval.”⁹

On January 13, 2021, the Commission issued its final Order¹⁰ in Kentucky Power’s 2020 base rate case. The Commission’s Order in that matter discussed certain concerns “regarding Kentucky Power’s and AEP’s activities related to transmission investment, control and ownership in Kentucky Power’s territory,” noting its concern was neither “remote or inconsequential.”¹¹ Furthermore, the Commission expressed its concern and dismay about the significant amount of costs Kentucky Power deems to be “‘largely outside’ of the utility’s control,” even though “more than 90 percent of the expenses originate with entities who share a CEO and CFO with Kentucky Power.”¹² Finally, the Commission put Kentucky Power “on notice . . . to take immediate steps to materially address” the issue of increasing affiliates expenses, informing Kentucky Power that failure to do so would force the Commission to address its concerns itself.¹³

⁸ *Id.* at 28.

⁹ *Id.*, Order (Ky. PSC June 11, 2021) at 8

¹⁰ Case No. 2020-00174, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of Its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals And Relief* (Ky. PSC Jan. 13, 2021). The January 13, 2021 Order decided all issues except those related to Net Metering and Qualifying Facilities.

¹¹ *Id.* at 60.

¹² *Id.* at 62–63.

¹³ *Id.* at 63.

On February 8, 2021, Kentucky Power filed an application pursuant to KRS 278.020(1); KRS 278.183; 807 KAR 5:001, Section 14; 807 KAR 5:001, Section 15; 807 KAR 5:011; and any other applicable law, seeking CPCNs for the Mitchell Generating Station (Mitchell) and approval of an environmental compliance plan and tariffs.¹⁴ Kentucky Power's proposed environmental compliance plan and CPCNs were to comply with the Environmental Protection Agency's (EPA) Coal Combustion Residuals (CCR) Rule and Steam Electric Effluent Limit Guidelines (ELG) Rule.

On April 22, 2021, AEP and Kentucky Power CEO Nicholas K. Akins announced "an ongoing review of our Kentucky assets. We expect to complete this review during 2021."¹⁵ Upon analyst questioning, Mr. Akins further noted that "what we're going to find out through the strategic process is what valuation Kentucky's ownership of Mitchell in terms of valuation and its impact on an overall price would be."¹⁶ Importantly, Mr. Akins's announcement of the strategic review was not specific to Kentucky Power, but rather "[AEP's] Kentucky assets."¹⁷ Ostensibly, these assets include those the Commission does not regulate, such as the tens-of-millions of dollars of Kentucky Transco's rate base that Kentucky Power depends on to serve its retail customers; assets that but for AEP's use of state transmission companies, would be part of Kentucky Power's regulated rate

¹⁴ Case No. 2021-00004, *Electronic Application of Kentucky Power Company for Approval of a Certificate of Public Convenience and Necessity for Environmental Project Construction at the Mitchell Generating Station, An Amended Environmental Compliance Plan, and Revised Environmental Surcharge Tariff Sheets* (filed Feb. 8, 2021).

¹⁵ American Electric Power Company Inc. First Quarter 2021 Earnings Call, Thursday, April 22, 2021, 1:00 PM GMT.

¹⁶ *Id.*

¹⁷ *Id.*

base. Additionally there are likely other assets AEP has in Kentucky, such as the extra high voltage Hanging Rock Line this Commission dealt with decades ago.¹⁸

Although Kentucky Power sought CPCNs for a plan that included compliance with both of EPA's Coal CCR and ELG Rules, the Commission's July 15, 2021 Order in the Mitchell environmental compliance case only granted a CPCN for CCR compliance. The Commission found that "Kentucky Power failed to carry its burden of proof that there is a need to construct projects to comply with ELG rules, that the proposed ELG compliance project will not create a wasteful duplication of facilities, and that the proposed ELG compliance project is reasonable and cost-effective."¹⁹

Mitchell, located in Moundsville, West Virginia, is owned by both Kentucky Power and affiliate Wheeling Power Company (Wheeling Power).²⁰ Each entity owns an undivided 50 percent interest in Mitchell, with Wheeling Power's interest being subject to the West Virginia Public Service Commission (WV PSC).²¹ Further, "[o]n August 4, 2021, the West Virginia PSC granted Wheeling Power's request for a CPCN to construct projects to comply with both CCR and ELG rules."²² The WV PSC's determination is conflicting with this Commission's Order regarding Mitchell environmental compliance. As required in the Commission's Order on rehearing in the Mitchell environmental case, Kentucky Power is required to provide status reports every ten days, with a requirement

¹⁸ See *Kentucky Power Company vs. Ky. Public Service Commission, et al.*, Ky. Ct. App., No. 86-CA-1031-MR (June 3, 1988) (unpublished).

¹⁹ Case No. 2021-00004, *Kentucky Power Company* (Ky. PSC July 15, 2021), Order at 18–19.

²⁰ *Id.* Order (Ky. PSC Aug. 19, 2021) at 5.

²¹ *Id.*

²² *Id.*

to detail "Kentucky Power and Wheeling Power's plan regarding Mitchell."²³ Kentucky Power's September 13, 2021 update explained that Wheeling Power has petitioned the WV PSC regarding Mitchell, with a request that West Virginia fully fund the ELG investment in order for Mitchell to operate past 2028.²⁴

Based on the foregoing, the Commission finds that this investigation is necessary for the Commission to satisfy its regulatory obligations, including, but not limited to, ensuring adequate, efficient and reasonable service and rates that are fair, just and reasonable. Given the current situation, caused almost exclusively by AEP's management, the Commission is concerned about the future of Kentucky Power as a utility and about the customers it serves in Eastern Kentucky. KRS 278.260 requires a utility be provided notice not less than 20 days before the time set for a hearing. Therefore, the Commission finds that an evidentiary hearing in this case should be held at the Commission's Office in the Richard Raff Hearing Room on October 5, 2021, at 9 a.m. Eastern Daylight Time.

In furtherance of ensuring an orderly hearing, the Commission will hold a formal, on the record, conference with parties in the Richard Raff Hearing Room on September 23, 2021, at 9 a.m. Eastern Daylight Time. The primary purpose of the formal conference will be to narrow the scope of the hearing and to ensure that Kentucky Power and any other party is adequately on notice about the items at issue for the Commission's October 5, 2021 hearing. Understanding the sensitivity of the issues at hand in light of public statements indicating the active marketing of AEP assets for sale, as well as anticipated

²³ *Id.* at Appendix A.

²⁴ *Id.*, Kentucky Power Response to Commission Staff's Rehearing Data Requests Dated August 19, 2021 (filed Sept. 13, 2021).

or actual regulatory proceedings in another jurisdiction, the Commission will hold the September 23, 2021 formal conference on the record, but it will not be live-streamed or open to the public.

The Commission will entertain any party's petition for confidentiality after the conclusion of the formal conference to determine the applicability of relevant exclusions to Kentucky Open Records Act to the record of that proceeding. Finding any or all of the formal conference to not fall under an exclusion to the Kentucky Open Records Act, the Commission will make public the record of the formal conference.

The Commission will further incorporate the record of certain prior proceedings into this investigation. As noted above, the basis for the Commission's concerns span a number of relatively recent matters before this body. Thus, the Commission will incorporate by reference the entirety of the records in the following cases: Case No. 2020-00062, Case No. 2020-000174, and Case No. 2021-00004. Furthermore, the Commission finds that any party to any of the above-mentioned cases shall be made parties to this case by merely filing a notice in this matter informing the Commission of their interest. The Commission understands that making those entities parties to this case through this order and requiring them to withdraw should they choose not to participate may add additional and unnecessary cost and work. Nevertheless, the parties to those other matters created the case record through their involvement in those cases. As such, they should be offered an opportunity to participate in this case should they choose to do so. Ultimately, regardless of the parties to this case, this is the Commission's investigation and as an administrative agency, it has the ability and duty to

weigh all evidence and arguments provided to it. Therefore, the involvement of any of these parties in this matter will not prejudice Kentucky Power's rights under the law.

Lastly, Kentucky Power recently noted its intent "to explore [the issues regarding Mitchell and Wheeling Power] and will work to bring the Commission a recommendation on how to handle the Mitchell operating agreement in a new docket for review."²⁵ The Commission appreciates Kentucky Power's interest in exploring paths forward that are to the ultimate benefit of its customers and the Commonwealth. Insofar as the Commission doesn't provide a path forward by order in this matter, Kentucky Power should use this docket to propose recommendations on any of the subjects mentioned, or related to those discussed, herein. Should deviations from regulations be necessary to accommodate requests or applications made in this docket, the Commission will give due consideration to any motions requesting such deviations.

IT IS THEREFORE ORDERED that:

1. This proceeding is initiated to investigate the provision of service, rates, and facilities of Kentucky Power.
2. A formal conference in this matter shall be held on Thursday, September 23, 2021, at 9 a.m. Eastern Daylight Time, in the Richard Raff Hearing Room at the offices of the Public Service Commission at 211 Sower Boulevard, Frankfort, Kentucky, to discuss the AEP strategic review of Kentucky assets; ownership of Mitchell, including whether Kentucky Power has considered selling its interest to Wheeling Power Company and finding other capacity; the need for a CPCN even if WV PSC approves Wheeling's

²⁵ *Id.*

petition; transmission planning and operation; and any other related matter. Commission Staff will contact parties to indicate who should be present from each party.

3. Pursuant to KRS 278.360 and 807 KAR 5:001, Section 9(9), a digital video transcript shall be made of the formal conference and filed in the record of this case.

4. An in-person evidentiary hearing in this matter shall be held on Tuesday, October 5, 2021, at 9 a.m. Eastern Daylight Time, in the Richard Raff Hearing Room at the offices of the Public Service Commission at 211 Sower Boulevard, Frankfort, Kentucky.

5. Kentucky Power shall give notice of the hearing in compliance with 807 KAR 5:001, Section 9(2)(b). In addition, the notice of hearing shall include the following statements: "This hearing will be streamed live and may be viewed on the PSC website, psc.ky.gov"; and "Public comments may be made at the beginning of the hearing. Those wishing to make oral public comments may do so by following the instructions listed on the PSC website, psc.ky.gov." At the time the notice is mailed or publication is requested Kentucky Power shall forward a duplicate of the notice and request to the Commission.

6. Pursuant to KRS 278.360 and 807 KAR 5:001, Section 9(9), a digital video transcript shall be made of the hearing.

7. Within three business days, counsel for Kentucky Power shall make an entry of appearance in this matter.

8. The Commission's Executive Director shall serve a copy of this Order on the following entities: the Attorney General of the Commonwealth of Kentucky, by and through his office of Rate Intervention; Kentucky Industrial Utility Customers; Walmart Inc.; Kentucky Solar Industries Association, Inc.; Mountain Association, Kentuckians for

the Commonwealth, and Kentucky Solar Energy Society, collectively; SWVA Kentucky, LLC; and the Sierra Club.

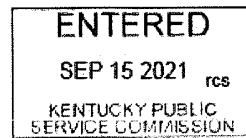
9. Should any of the entities identified in ordering paragraph 8 above seek to participate in this matter as a party, they shall file notice with the Commission indicating their interest to be made a party along with an entry of appearance of counsel and a written statement pursuant to 807 KAR 5:001, Section 8(9), that:

a. Certifies that it, or its agent, possesses the facilities to receive electronic transmissions; and

b. Sets forth the electronic mail address to which all electronic notices and messages related to this proceeding should be served.

10. Any entity that files the notice permitted by order paragraph 9 shall be entitled to the full rights of a party and shall be served with the Commission's orders and with filed testimony, exhibits, pleadings, correspondence, and all other documents submitted by parties after the date of their notice.

By the Commission



ATTEST:


Executive Director

Case No. 2021-00370

*Brett Mattison
COO
Kentucky Power Company
1645 Winchester Avenue
Ashland, KY 41101

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Ashland, KY 41101

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Ashland, KY 41101

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

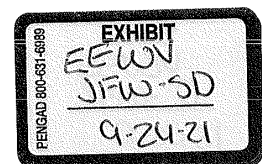
CASE NO. 20-1040-E-CN

APPALACHIAN POWER COMPANY
and WHEELING POWER COMPANY

Application for the issuance of a certificate of
public convenience and necessity for the internal
modifications at coal fired generating plants necessary to
comply with federal environmental regulations

**SUPPLEMENTAL DIRECT TESTIMONY OF
JAMES F. WILSON
ON BEHALF OF
WEST VIRGINIA CITIZENS ACTION GROUP,
SOLAR UNITED NEIGHBORS, AND
ENERGY EFFICIENT WEST VIRGINIA**

September 24, 2021



**SUPPLEMENTAL DIRECT TESTIMONY OF
JAMES F. WILSON
ON BEHALF OF
WEST VIRGINIA CITIZENS ACTION GROUP,
SOLAR UNITED NEIGHBORS, AND
ENERGY EFFICIENT WEST VIRGINIA**

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q 1: Please state your name, position, and business address.**

3 A: My name is James F. Wilson. I am an economist and independent consultant doing
4 business as Wilson Energy Economics. My business address is 4800 Hampden Lane
5 Suite 200, Bethesda, Maryland 20814.

6 **Q 2: Are you the same James F. Wilson who filed direct testimony in this proceeding on**
7 **May 6, 2021, and rebuttal testimony on May 20, 2021?**

8 A: Yes, I am. My experience and qualifications were described in my direct testimony and
9 curriculum vitae, which was Attachment JFW-1 to my direct testimony.

10 **Q 3: On whose behalf are you providing this supplemental testimony in this proceeding?**

11 A: I am testifying on behalf of West Virginia Citizens Action Group, Solar United
12 Neighbors, and Energy Efficient West Virginia.

13 **Q 4: What is the scope and purpose of your supplemental testimony?**

14 A: My supplemental testimony responds to the Companies' September 8, 2021 Petition to
15 Reopen Case and Take Further Action and supporting testimony.

16 **Q 5: What materials were you able to review related to the Companies' September 8,**
17 **2021 filing?**

18 A: I reviewed the filing itself, which consists of twenty-six pages, including a combined
19 seventeen pages of written testimony from Messrs. Short and Spitznogle.

20 **Q 6: In your experience, is it common for a utility to support with just seventeen pages of**
21 **testimony, a proposed course of action that would cost its jurisdictional customers**
22 **hundreds of millions of dollars more than previously approved, and put the utility**
23 **on the path to significant ownership, operational, and cost allocation changes to the**
24 **utility's generation capacity?**

25 A: No, the conditions of my supplemental testimony here are quite unusual, and I say that as
26 someone who has spent thirty-eight years consulting in the energy industry, including
27 providing expert testimony in more than forty state utility commission proceedings in a

1 wide variety of states. In this instance, I did not have any opportunity to ask questions via
2 discovery and did not have access to any workpapers, modeling files and results, or other
3 analyses that might support the calculations and claims advanced in the Companies'
4 September 8 filing. It is also unusual that a utility would propose something that
5 necessitates significant ownership, operational, and cost allocation changes without
6 providing a detailed and concrete proposal on each such set of changes, including
7 forecasted cost implications over time, and whether such ownership and allocation
8 changes are needed to meet the Companies' West Virginia customer load.

9

10 **II. SUMMARY AND RECOMMENDATION**

11 **Q 7: Please summarize your supplemental testimony.**

12 A: My supplemental testimony leads to the following conclusions and recommendations.

13 1. The Companies have not provided sufficient information to make reasoned judgments
14 about their proposal to recover 100% of the costs of ELG retrofits at the Mitchell
15 plant from West Virginia customers.

16 2. The proposal to recover 100% of the cost of the compliance work at the Amos and
17 Mountaineer plants from West Virginia customers also calls into question the
18 reasonableness of those investments. However, my earlier testimony did not address
19 the investments at those plants, and I did not have sufficient time to consider those
20 plants for this supplemental testimony.

21

1 **III. PROJECT COST INCREASES**

2 **Q 8: What was your recommendation to the Commission at the time of your earlier**
3 **testimony?**

4 A: I recommended that the Commission direct the Companies to pursue “Alternative 2”,
5 under which the ELG investment is not pursued for the Mitchell plant and that plant is
6 retired by 2028.¹

7 **Q 9: What are the Companies proposing with regard to the Mitchell Plant in their**
8 **September 8, 2021 filing?**

9 A: In their September 8, 2021 filing, the Companies request that the Commission provide the
10 following additional relief with regard to the Mitchell Plant:

- 11 1. A ruling that the Commission wants the Companies to proceed with the ELG retrofits
12 on the Mitchell Plant, including on Kentucky Power’s 50% undivided interest in the
13 plant.²
- 14 2. An “acknowledgment” that, if the Mitchell Plant is to operate beyond 2028, “additional
15 investments and O&M expenses” will be needed at the plant prior to 2028, and “will
16 be the responsibility of West Virginia customers. . .”³
- 17 3. A “commitment” that the Commission will “continue to authorize recovery of the costs
18 described in items 1 and 2 above, so long as they are reasonable and prudently incurred,
19 once the Companies incur such costs at the Commission’s direction.”⁴
- 20 4. An instruction that Wheeling Power (“WPCo”) propose in a future docket a plan “that
21 recognizes the changes needed to deal with the issues resulting from any directive from

¹ Direct Testimony of James F. Wilson, page 42 (May 6, 2021) (“Wilson Direct”).

² Petition to Reopen Case and To Take Further Action (Sept. 8, 2021), at 5.

³ *Id.*

⁴ *Id.*

1 this Commission to perform the ELG work at Mitchell.”⁵ In his testimony, Companies’
2 witness Randall Short states that if the ELG retrofits are to be carried out on Kentucky
3 Power’s 50% undivided interest in Mitchell, the operating agreement for that plant
4 “will need to be updated,” and a “path to WPCo’s ownership of the entire Mitchell
5 plant after 2028” would need to be developed.⁶

6

7 **Q 10: Have the Companies provided adequate support for the relief related to the Mitchell**
8 **plant requested in their September 8, 2021 filing?**

9 A: No. As I noted earlier, there were only seventeen pages of testimony and no workpapers.

10 **Q 11: You mention the cost estimates. Have the estimated project costs changed?**

11 A: Yes, the cost estimates have increased significantly across all three plants. My earlier
12 testimony focused on the Mitchell plant, and I will continue that focus here.

13 In their December 2020 filing, the Companies estimated the total cost of CCR and ELG
14 compliance at the Mitchell plant would be \$133.5 million, with West Virginia customers
15 responsible for WPCo’s 50% ownership share, or approximately \$67 million.⁷ The
16 Companies are now projecting the total cost of ELG and CCR compliance at the Mitchell
17 plant would be \$148.3 million, a \$14.8 million or 10% increase in total cost.⁸

18 **Q 12: Have the Companies disclosed in their filings how much of the newly estimated**
19 **\$148.3 million cost they are seeking to recover from West Virginia customers?**

20 A: No. Mr. Short does not identify the portion of the increased project costs attributable to
21 ELG compliance versus CCR compliance at the Mitchell plant and, therefore, it is

⁵ *Id.*

⁶ Company Ex. RRS-SC, Supplemental Direct Testimony of Randall R. Short, at 11:7–9 (Sept. 8, 2021) (“Short Supp. Direct”).

⁷ Company Exhibit BDS-D, Direct Testimony of Brian D. Sherrick, at 11:16–19 (Dec. 23, 2020) (“Sherrick Direct”).

⁸ Short Supp. Direct, at 7:13–22.

1 unclear exactly how much of the \$148.3 million estimated cost the Companies are
2 proposing to charge to their West Virginia customers. In the Companies' initial
3 application, the \$67 million in West Virginia jurisdictional costs for the Mitchell projects
4 were based on \$49 million for ELG compliance and \$18 million for CCR compliance.⁹
5 The Companies are now proposing that 100% of the ELG costs – i.e., \$98 million –
6 would be paid for by West Virginia customers. And it is safe to assume that at least the
7 \$18 million in CCR costs would still be attributed to West Virginia customers, which
8 brings the total cost to those customers to at least \$116 million. If all of the \$14.8 million
9 increase in total Mitchell costs identified in the September 8 filing is attributable to the
10 ELG projects, then the total cost sought to be recovered from West Virginia customers
11 would be \$130.8 million. If all of the \$14.8 million increase is for CCR projects, then the
12 total sought to be recovered would be \$123.4 million.

13 **Q 13: Did the Companies explain in their filings why project cost estimates have**
14 **increased?**

15 A: No. The Companies have not explained what factors are causing the increases, or even
16 which particular projects the increases are attributable to (i.e., CCR or ELG compliance).

17 **Q 14: When did the Companies learn that the costs of these projects would increase**
18 **significantly relative to the estimates provided in December 2020?**

19 A: This is unknown. The Companies do not explain when they realized the project costs
20 would be higher.

⁹ Martin Direct, Table 1, at 6.

1 **Q 15: To evaluate the Companies' requests, are explanations for the costs increases**
2 **necessary?**

3 A: Yes. Without an explanation of the drivers and contributors to those increases, it is not
4 possible to evaluate the reasonableness of these new cost estimates. In addition, it is also
5 necessary to know these drivers and contributors to form an opinion of the likelihood of
6 further cost increases in the coming months and years.

7 **Q 16: In addition to the increased CCR and ELG project costs, are there other additional**
8 **costs that West Virginia customers would be subject to under the relief requested in**
9 **the Companies' September 8, 2021 filing?**

10 A: Yes, there appear to be two categories of additional costs that West Virginia customers
11 would become subject to if the relief requested by the Companies were granted:

12 1. The Companies are seeking to make "additional investments and O&M expenses at
13 the plants [that] will be needed prior to 2028 . . . the responsibility of West Virginia
14 customers."¹⁰ These appear to be investments and expenses above and beyond the
15 costs of the ELG projects themselves. The Companies' filings, however, are entirely
16 silent on what those investments and expenses may be, how much they would cost, or
17 what the impact to customers of the responsibility for such investments and expenses
18 would be.

19 2. The Companies acknowledge that requiring West Virginia customers to pay for 100%
20 of the Mitchell ELG retrofits would put WPCo on the "path to . . . ownership of the
21 entire Mitchell plant after 2028."¹¹ Such ownership change could put West Virginia
22 customers on the hook for significant costs that are entirely unexamined in the

¹⁰ Petition to Reopen Case and To Take Further Action (Sept. 8, 2021), at 5.

¹¹ Short Supp. Direct, at 11:7-9.

1 Companies' September filings, as I discuss in the next section of my supplemental
2 testimony.

3

4 **IV. UNKNOWN COSTS FLOWING FROM OWNERSHIP, OPERATIONAL, AND COST ALLOCATION**
5 **CHANGES**

6 **Q 17: You mentioned that the Companies propose an ownership change for the Mitchell**
7 **plant. Have the Companies offered in their filings an explanation of how a change in**
8 **the ownership of the Mitchell plant would affect West Virginia customers?**

9 A: No. Neither the September 8 filing nor the September 20 reply provides any details on the
10 terms or costs of changing the ownership of the Mitchell plant. Nor do those filings offer
11 any projection of the impacts to West Virginia customers of such ownership change. The
12 filings similarly provide no detail on the necessary changes to the operational agreement
13 for the Mitchell plant, and no discussion of the potential impacts to West Virginia
14 customers of such changes.

15 **Q 18: Were you able to analyze the potential impacts to West Virginia customers should**
16 **ownership of the Mitchell plant change?**

17 A. No, without a concrete proposal from WPCo explaining the terms and costs of an
18 ownership change, it is not possible to meaningfully evaluate potential impacts from
19 those changes.

20 **Q 19: If the Commission grants the requested relief related to the Mitchell plant, would**
21 **you be concerned about the cost implications of future ownership or operational**
22 **changes at the Mitchell plant?**

23 A: Yes. If there is an order in this proceeding that puts WPCo on a path to full ownership of
24 the Mitchell plant, that would make costs related to ownership and operational changes
25 more at risk in Kentucky than in West Virginia. With costs more at risk in Kentucky,
26 there would be an incentive for the Companies to push a higher portion of the total cost
27 responsibility onto West Virginia customers.

1 **Q 20: Have the Companies provided evidence showing that its West Virginia customers**
2 **need additional capacity from the Mitchell plant?**

3 A: No, they have not. Mr. Short's supplemental direct testimony does not assert a need for
4 acquiring full ownership of the Mitchell plant to serve West Virginia customers' capacity
5 or energy requirements.

6 **Q 21: Do the Companies' West Virginia customers need additional capacity from the**
7 **Mitchell plant?**

8 A: They do not. Earlier in this proceeding, Witness Martin forecasted the Companies'
9 capacity needs, which I addressed in Section V of my direct testimony.¹² The Companies'
10 own analysis forecasted flat total capacity needs over time, with excess capacity beyond
11 2028.¹³ As explained in my direct testimony, the Companies' analysis likely overstates
12 capacity needs.¹⁴ But even if one were to accept the Companies' analysis, it does not
13 show a capacity need to both continue operating the Companies' existing coal units
14 beyond 2028 *and* add nearly 800 MW of capacity by acquiring full ownership of the
15 Mitchell plant. To the contrary, when the Companies factored in WPCo's ability to rely
16 on expected excess capacity of Appalachian Power Company ("APCo"), they concluded
17 that WPCo would only need to acquire 462 MWs of additional capacity to retire its 800
18 MWs of Mitchell capacity in 2028.¹⁵

¹² Wilson Direct, at 17:14–24:5.

¹³ Wilson Direct, at 23:6–16.

¹⁴ Wilson Direct, at 17:14–24:5.

¹⁵ Revised Direct Testimony of James Martin, 28:18 to 29:4 ("In 2028, APCo is expected to have a 504 MW capacity surplus. The West Virginia 42% share of that would be 212 MW. This 212 MW would be used to offset WPCo's short position without Mitchell. . . . Per page 1 of my Exhibit JFM D-4, WPCo by itself would be 674 MW short in 2028 without Mitchell. The net of these two stand-alone positions is 462 MW short for West Virginia as a whole in 2028.").

1 **V. NO RECORD EVIDENCE MODELING UPDATED COSTS OR OWNERSHIP, OPERATIONAL OR**
2 **COST ALLOCATION CHANGES**

3 **Q 22: Did the Companies previously estimate the long-run net present value cost of the**
4 **Mitchell ELG retrofits to customers?**

5 A: Yes. In support of the Companies' original filing in December 2020, Witness Martin
6 performed a cost-benefit analysis to estimate the long-run net present value cost to
7 customers, which he then compared to determine the lowest cost option. My direct
8 testimony discussed that modeling and critiqued some of the assumptions underlying it.

9 **Q 23: Is it common for utilities to provide such net present value estimates in cases like**
10 **this one?**

11 A: Yes. In order to compare different courses of action, each with different capital and
12 operating cost implications over time, utilities commonly use modeling to estimate the
13 present value of costs and revenues for each course of action. Net present value
14 comparison enables apples-to-apples judgments, informing decisions about which course
15 of action would be expected to lead to the lowest cost for customers.

16 **Q 24: Once a utility presents a net present value analysis, how does the review of that**
17 **analysis typically proceed?**

18 A: A utility will typically present testimony and workpapers that identify and explain the
19 inputs, assumptions, and results of the analysis, and also provide responses to discovery
20 requests regarding the analysis. This allows the other parties' experts, Commission Staff,
21 and the Commissioners to review the modeling and assumptions and evaluate the
22 accuracy and reliability of the results.

23 **Q 25: Witness Martin's December 2020 testimony included estimates of the long-term**
24 **financial impacts of conducting the CCR/ELG retrofits at Mitchell, versus foregoing**
25 **the retrofits and retiring Mitchell in 2028. Did Witness Martin's modeling**
26 **contemplate WPCo acquiring a 100% interest in the Mitchell plant?**

27 A: No, the modeling did not contemplate an ownership change at the Mitchell plant.

1 **Q 26: Did Witness Martin's modeling in support of the Companies' December 2020 filing**
2 **contemplate any changes to the operating agreement for the Mitchell plant?**

3 A: No, the modeling did not contemplate operational changes at the Mitchell plant.

4 **Q 27: Did Witness Martin's modeling in support of the Companies' December 2020 filing**
5 **reflect the higher cost estimates provided in the September 8 filing?**

6 A: No, the modeling was based on the lower cost estimates the Companies provided in
7 December 2020.

8 **Q 28: Did Witness Martin's modeling in support of the Companies' December 2020 filing**
9 **reflect the impact to West Virginia customers of the "additional investments and**
10 **O&M expenses" that the Companies' September 8 filing seeks to make them**
11 **responsible for?**

12 A: No, the modeling assumed that West Virginia customers would be responsible for only
13 the costs attributable to WPCo's 50% interest in the Mitchell Plant. While the
14 Companies' September 8 filing does not identify exactly what "additional investments
15 and O&M expenses" they now seek to make West Virginia customers responsible for, to
16 the extent that those costs were not already attributable to WPCo's 50% interest in
17 Mitchell, it appears that they were not reflected in Mr. Martin's modeling results.

18 **Q 29: Given that the previous modeling did not include costs related to ownership and**
19 **operational changes, updated project cost estimates, or increased responsibility for**
20 **additional capital investments and O&M expenses at the Mitchell plant, can it**
21 **support the requested relief in the Companies' September 8 filing?**

22 A: No; because the previous modeling did not incorporate all these new costs and updated
23 costs, the conclusions of that modeling do not reflect the overall costs and benefits now at
24 issue.

25 **Q 30: Before the Companies' September 8 filing, did the Companies ever put forward**
26 **evidence showing the cost implications should WPCo's 50% ownership of the**
27 **Mitchell plant change in any way?**

28 A: No, I am not aware of any such evidence, or any discussion of that question in the regular
29 course of this proceeding.

1 **Q 31: Can a change in plant ownership impact the prudence of a capital investment?**

2 A: Yes. There is no information in the record disclosing or even estimating what a
3 reasonable purchase price for Kentucky Power's 50% ownership share might be, or who
4 would pay that purchase price and when. There is similarly no detail provided on what
5 the terms of any hypothetical future ownership change might be, no detail on long-term
6 liabilities that would accrue to WPCo as a result of acquiring a 100% interest in the
7 Mitchell plant, and no discussion of whether or when additional capacity or energy from
8 the Mitchell plant is needed to serve West Virginians.

9 **Q 32: What long-term liabilities could the change in ownership potentially impose on West**
10 **Virginia customers?**

11 A: If WPCo were to acquire 100% ownership of the Mitchell plant, then presumably all of
12 the ongoing capital, fixed O&M and variable O&M costs would be the responsibility of
13 West Virginia customers, rather than just the 50% of those costs that are currently West
14 Virginia jurisdictional. There would likely also be increased cost responsibility for
15 eventual closure, decommissioning, and remediation costs. There is also the general risk
16 of bearing costs to comply with any future federal regulation impacting operation of the
17 coal units over the next two decades. Finally, responsibility for some portion of the
18 undepreciated book value of Kentucky Power's 50% share of Mitchell would presumably
19 shift to West Virginia customers as a result of such transfer.

20 **Q 33: Have the Companies provided supplemental analysis reflecting their best estimate of**
21 **the long-run net present value cost to customers if West Virginia customers bear**
22 **100% of the ELG compliance costs?**

23 A: No, the Companies have not provided updated modeling based on the significant cost
24 increases first mentioned in its September 8 filing, nor have they provided updated

1 modeling that incorporates any ownership or operational changes related to the Mitchell
2 plant or allocation changes related to the Amos and Mountaineer plants.

3 **Q 34: If the Companies do update the modeling, what would you need in order to have a**
4 **fair opportunity to consider that new evidence and offer your expert opinion on its**
5 **accuracy and value?**

6 A: I would need the same type of information provided earlier in this proceeding for Witness
7 Martin's net present value estimates: workpapers showing the inputs, assumptions, and
8 outputs. I would also need the ability to submit discovery, and to review and perform
9 analysis based on the responses to discovery. Without such information and opportunity
10 for discovery and analysis, one could not assess the accuracy and value of any updated
11 modeling that might be provided.

12 **Q 35: Directionally speaking, what would you expect updated modeling would show?**

13 A: With the caveat that there is no substitute for the analysis I just described based on
14 workpapers and discovery, it seems safe to expect that an updated analysis with the
15 increased ELG costs and the change in cost allocation would result in the investments
16 appearing substantially less attractive than was reflected in the Companies' December
17 2020 application. The Companies' previous modeling showed that, in the Combined
18 Capacity case, retiring the Mitchell plant by 2028 would save West Virginia customers
19 \$27 million per year through 2040.¹⁶ On a net present value basis, the Companies'
20 evidence previously showed a \$98 million benefit to West Virginia customers by
21 foregoing ELG compliance work and retiring the Mitchell plant in 2028.¹⁷ The
22 directional impact in the evaluation would be even greater with the inclusion of the

¹⁶ June 8, 2021 Hearing, Tr. at 59.

¹⁷ Wilson Direct, at 38–39 (citing Non-Confidential Martin WPCo Ex. D2 and Testimony Workpapers).

1 “additional investments and O&M expenses” that the Companies propose to make West
2 Virginia customers responsible for, and/or of costs related to the post-2028 acquisition of
3 the 100% ownership of the Mitchell Plant that the Companies’ request would put WPCo
4 on the “path” towards.

5 **Q 36: Have there been any recent developments in the PJM wholesale market that reflect**
6 **on the potential value to customers of the compliance investments?**

7 A: Yes. PJM’s most recent capacity auction cleared at a surprisingly low price, \$50/MW-
8 day. This outcome provides additional evidence that capacity is likely to remain abundant
9 and low-cost in PJM for additional years.

10 **Q 37: Does this complete your supplemental testimony?**

11 A: Yes, it does.

CERTIFICATE OF SERVICE

I hereby certify that on this date I caused to be served a copy of the foregoing
Supplemental Direct Testimony of James F. Wilson upon the parties listed below:

Wendy Braswell
Lucas Head
Public Service Commission
201 Brooks Street
Charleston, WV 25301
wbraswell@psc.state.wv.us
lhead@psc.state.wv.us

William C. Porth
Anne C. Blankenship
Jonathon C. Stanley
Robinson & McElwee PLLC
P.O. Box 1791
Charleston, WV 25326
wcp@ramlaw.com
acb@ramlaw.com
jcs@ramlaw.com

James R. Bacha
American Electric Power Service
Corporation
1 Riverside Drive
P.O. Box 16631
Columbus, OH 43215

Heather B. Osborn
Bobby Lipscomb
Robert F. Williams, Esq.
Consumer Advocate Division
300 Capitol Street, Suite 810
Charleston, WV 25301
hosborn@cad.state.wv.us
blipscomb@cad.state.wv.us
rwilliams@cad.state.wv.us

Dorothy E. Jaffe
Sierra Club

Susan J. Riggs
Jason C. Pizatella
Spilman Thomas & Battle, PLLC
300 Kanawha Boulevard, East
Charleston, WV 25301
sriggs@spilmanlaw.com
jpizatella@spilmanlaw.com

Derrick P. Williamson
Barry A. Naum, Esq.
Counsel, WVEUG
Spilman Thomas & Battle, PLLC
1100 Bent Creek Blvd., Suite 101
Mechanicsburg, PA 17050
dwilliamson@spilmanlaw.com
bnaum@spilmanlaw.com

J. Michael Becher
Appalachian Mountain Advocates
Post Office Box 11571
Charleston, West Virginia 25339
Telephone: (304) 382 - 4798
mbecher@appalmad.org

Evan Dimond Johns
Appalachian Mountain Advocates
Post Office Box 507
Lewisburg, West Virginia 24901
(434) 738 - 1863
ejohns@appalmad.org

Curtis R. A. Capehart
State of West Virginia

50 F Street Northwest, Eighth Floor
Washington D.C., 20001
(202) 675-6275
dori.jaffe@sierraclub.org

Deputy Attorney General
State Capitol Complex
Building 1, E-26
Charleston, WV 25301
Email Address:
curtis.r.a.capehart@wvago.gov

H. Brann Altmeyer
Jacob C. Altmeyer
West Virginia Coal Association
Phillips, Gardill, Kaiser & Altmeyer, PLLC
61 Fourteenth Street
Wheeling, WV 26003
brannaltmeyer @pgka.com
jacobaltmeyer @pgka.com

Date: September 24, 2021



Emmett Pepper

September 24, 2021

Connie Graley, Executive Secretary
Public Service Commission of West Virginia
201 Brooks Street, PO Box 812
Charleston, WV 25323-0812

Re: *APPALACHIAN POWER COMPANY and WHEELING POWER
COMPANY, Application for the issuance of a certificate of
public convenience and necessity for the internal modifications at coal
fired generating plants necessary to comply with federal environmental
regulations, Case No. 20-1040-E-CN*

Dear Ms. Graley:

Pursuant to the Commission's Order of April 7, 2020, in General Order No. 262.3, attached for filing on behalf of West Virginia Citizens Action Group, Solar United Neighbors, and Energy Efficient West Virginia is a copy of the Supplemental Direct Testimony of James F. Wilson, in the above-referenced case.

Copies of this Supplemental Direct Testimony are being served upon all parties of record.

Please contact me if you have any questions concerning this filing.

Respectfully,



Emmett Pepper
W. Va. Bar No. 12051
Energy Efficient West Virginia
1500 Dixie Street
Charleston, WV 25311
304-346-5891
917-617-8208 (cell)
emmett@eewv.org

*Counsel for West Virginia Citizen Action
Group, Solar United Neighbors, and Energy
Efficient West Virginia*

Enclosures