

PART H

SUMMARY OF PREFILED STAFF TESTIMONY OF SEAN M. WELSH

Staff makes the following conclusions and recommendations for the Commission's consideration:

- 1) Staff recommends the following revenue requirements for each rate adjustment clause (“RAC”) for the March 1, 2026 through February 28, 2027 rate year:

<u>RAC</u>	<u>Revenue Requirement</u>
A.6 RPS RAC	\$20,471,196
A.5 RPS RAC	\$44,006,353
A.5 PCAP RAC	\$4,971,822
Rider NBC	<u>\$(24,293)</u>
Total	\$69,425,078

- 2) The estimated 30-year long-term revenue requirement (“LTRR”) of the RPS Plan is \$8.0 billion, consisting of projected RPS costs of \$15.1 billion and projected energy benefits of \$7.1 billion. Based on revenue and customer class allocations as of the Company’s 2024 biennial review, the LTRR results in estimated bills through 2054 as depicted below:¹

<u>Customer Class</u>	<u>2024</u>	<u>2030</u>	<u>2040</u>	<u>2054</u>	<u>Cumulative % Increase</u>
Residential	\$173.95	\$181.78	\$217.64	\$326.54	87.7%
Small General Service	\$589.80	\$612.16	\$693.72	\$946.94	60.6%
General Service	\$21,426	\$22,430	\$25,505	\$35,248	64.5%
Large Power Service	\$48,192	\$50,833	\$56,417	\$75,101	55.8%

¹ The 2024 bills shown include all rate components. The post-2024 bill changes shown include only the costs and benefits of resources proposed in the Company’s RPS Plan. This is consistent with bill impact presentations in previous APCo RPS Plan cases.

**PREFILED STAFF TESTIMONY
OF
SEAN M. WELSH
APPALACHIAN POWER COMPANY
CASE NO. PUR-2025-00049
JULY 16, 2025**

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**PREFILED STAFF TESTIMONY
OF
SEAN M. WELSH

APPALACHIAN POWER COMPANY

CASE NO. PUR-2025-00049
JULY 16, 2025**

Introduction

1 **Q. PLEASE STATE YOUR NAME AND THE POSITION YOU HOLD WITH THE**
2 **STATE CORPORATION COMMISSION (“COMMISSION”).**

3 **A.** My name is Sean M. Welsh, and I am a Senior Manager with the Commission's Division
4 of Utility Accounting and Finance.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

6 **A.** My testimony addresses Appalachian Power Company’s (“APCo” or “Company”) petition
7 (“Petition”) for approval of its 2025 renewable portfolio standard (“RPS”) plan (“RPS
8 Plan”), filed pursuant to § 56-585.5 D 4 of the Code of Virginia (“Code”), and associated
9 rate adjustment clauses (“RACs”). I present Commission Staff’s (“Staff”) recommended
10 RAC revenue requirements as well as the RPS Plan bill impact analysis.

11 **Q. WHAT ARE STAFF’S FINDINGS AND RECOMMENDATIONS CONCERNING**
12 **THE RAC REVENUE REQUIREMENTS?**

13 **A.** Staff recommends the following revenue requirements for each RPS RAC:

Table 1: RPS RAC Revenue Requirements

<u>RAC</u>	<u>Revenue Requirement</u>
A.6 RPS RAC	\$20,471,196
A.5 RPS RAC	\$44,006,353
A.5 PCAP RAC	\$4,971,822
Rider NBC	<u>\$(24,293)</u>
Total	\$69,425,078

Q. WHAT ARE STAFF’S FINDINGS AND RECOMMENDATIONS CONCERNING THE RPS PLAN BILL IMPACT ANALYSIS PRESENTED BY APCO?

A. The long-term revenue requirement of the RPS Plan through 2054 is approximately \$8.0 billion. The resulting bill impacts of the RPS Plan are shown below.

Table 2: RPS Plan Bill Impacts

<u>Customer Class</u>	<u>2024</u>	<u>2030</u>	<u>2040</u>	<u>2054</u>	<u>Cumulative % Increase</u>
Residential	\$173.95	\$181.78	\$217.64	\$326.54	87.7%
Small General Service	\$589.80	\$612.16	\$693.72	\$946.94	60.6%
General Service	\$21,426	\$22,430	\$25,505	\$35,248	64.5%
Large Power Service	\$48,192	\$50,833	\$56,417	\$75,101	55.8%

RAC Revenue Requirements

Q. PLEASE SUMMARIZE THE VARIOUS RACS ASSOCIATED WITH THE RPS.

A. APCo’s framework utilizes four RACs to recover the costs, net of benefits, of its RPS-associated projects. The A6 RAC recovers the non-renewable energy certificate (“REC”) costs of Virginia Clean Economy Act (“VCEA”)² resources owned by APCo, net

² 2020 Va. Acts, chs. 1193, 1194.

1 of any capacity revenue benefits. The REC RAC recovers the REC-related costs of owned
 2 VCEA resources and power purchase agreements (“PPAs”) as well as stand-alone REC
 3 purchases. The PCAP RAC recovers the capacity portion of VCEA PPA costs, net of any
 4 capacity revenue benefits. Rider NBC recovers the energy costs, net of energy benefits, of
 5 both owned VCEA resources and VCEA PPAs from shopping customers.³

6 **Q. HOW IS THE REVENUE REQUIREMENT DETERMINED FOR EACH OF THE**
 7 **RACS?**

8 **A.** The VCEA-associated RACs consist of three cost recovery components, organized by time
 9 period. The actual cost true-up factor (“True-Up Factor”) is designed to recover the
 10 over- or under-recovery balance of actual costs and revenues as of January 31, 2025
 11 (“True-Up Date”).⁴ It is calculated as the difference between the RAC revenues collected
 12 from Virginia-jurisdictional ratepayers through the True-Up Date and the
 13 Virginia-jurisdictional portion of applicable RPS RAC costs incurred through the True-Up
 14 Date. The audit procedures undertaken by Staff to verify these costs and revenues are
 15 discussed in greater detail below.

16 The Bridge Period Factor recovers projected costs for the period February 2025 –
 17 February 2026, net of projected recoveries during that period. Projected costs over the
 18 twelve-month period beginning March 1, 2026 (“Rate Year”) are recovered through the
 19 VCEA Rate Year Factor (“Projected Factor”). All three components are summed together

³ Energy costs, net of benefits, are recovered from non-shopping customers through APCo’s fuel factor, which is updated in a separate annual filing.

⁴ Staff has audited actual costs and recoveries through December 2023 in prior RPS filings. Thus, the actual cost audit in this case is focused on costs and recoveries for the period January 2024 – January 2025 (“Review Period”).

to determine the Rate Year revenue requirement used to set rates to go into effect March 1, 2026.

Q. PLEASE DISCUSS THE DIFFERENCES BETWEEN STAFF'S AND THE COMPANY'S REVENUE REQUIREMENTS.

A. There is only one material difference between the Staff and Company revenue requirements. Namely, Staff incorporates the capital structures and weighted-average costs of capital recommended by Staff witness Alex Elmes. This increases the RPS RAC revenue requirements by \$516,117.⁵

Q. PLEASE DISCUSS STAFF'S AUDIT OF ACTUAL COSTS INCURRED BY APCO AND INCLUDED IN THE TRUE-UP FACTOR.

A. To verify the actual costs and benefits included in the True-Up Factor, Staff sampled and reviewed invoices to verify that they were properly recorded on the Company's books and records and appropriate for inclusion in the various VCEA RACs. Staff's audit included:

- Sampling of capital expenditures at the Amherst solar facility, which is the only Company-owned facility in service during the Review Period. Staff audited 68% of new capital spent during the Review Period, including all invoices over \$800;
- Recalculation of revenue during the Review Period, based on actual billing determinants and approved rates;
- Review of depreciation and asset retirement obligation calculations and workpapers, including decommissioning studies;

⁵ Staff notes that the Commission has historically limited the revenue requirement to the amount the was noticed to the public. Should the Commission so choose, any difference between the actual costs incurred and the amount collected from customers would be included in a future true-up.

- Sampling of REC purchases during the months of October 2024 and January 2025;
- Verification of the calculation and accounting for Wind, Water, and Solar premiums included in the REC RAC, including REC prices during the Review Period; and
- Verification that PPA charges during the Review Period were appropriately accounted for and utilized the contracted rates.

Staff will continue to audit actual costs as they are incurred in the future.

Q. HAS STAFF REVIEWED THE COSTS UNDERLYNG THE BRIDGE PERIOD AND PROJECTED FACTOR?

A. Yes. Staff reviewed the Company's projections and will continue to audit the costs as the Company actually incurs them. Staff notes that any difference between these projections and the actual costs incurred will be addressed through a future RPS RAC True-Up.

Long-Term Revenue Requirement ("LTRR")

Q. PLEASE DISCUSS THE PURPOSE OF THE LTRR AND BILL IMPACT ANALYSIS INCLUDED IN THE PETITION.

A. The RPS LTRR and bill impact analysis present, for informational purposes, the projected costs, benefits, and resulting bill impacts of the Company's proposed RPS Plan, including small modular nuclear reactors ("SMRs"),⁶ over the 30-year period from 2025 to 2054. They necessarily include many of the Company's assumptions and estimates about the future, as of the time of the Petition's filing. Therefore, the LTRR and bill impact analysis

⁶ SMRs are not included in Rider RPS but impact the Company's RPS requirements by reducing the total electric energy required to be offset by RECs.

are not intended to, and do not, quantify the definitive long-term cost of the RPS Plan. The RPS Plan's actual future costs will be addressed by Staff in future proceedings as recovery of those costs is requested by the Company.

Q. WHAT IS THE RPS LTRR PRESENTED BY THE COMPANY IN THIS CASE?

A. The Company's Petition presents a LTRR of \$8.0 billion for the RPS Plan, consisting of costs of \$15.1 billion and energy benefit offsets of \$7.1 billion.⁷ Based on its review of the underlying workpapers, Staff believes that the LTRR and resulting bill impact analysis, discussed below, reasonably reflect the costs, offsets, and resulting revenue requirements of the Company's proposed RPS Plan. The following chart presents the 30-year LTRR by resource type:

Table 3: RPS Plan LTRR
(In Millions)

<u>Resource</u>	<u>Wind</u>	<u>Solar</u>	<u>SMR</u>	<u>Energy Efficiency</u>	<u>REC Purchases</u>	<u>Total Costs</u>	<u>Energy Offset⁸</u>	<u>Costs Net of Offsets</u>
Revenue Requirement	\$3,534	\$7,194	\$2,348	\$77	\$53	\$15,085	\$(7,072)	\$8,014

⁷ See Petition, Attachment 1, Page 58 of 73. Excluding SMRs from the analysis would reduce the costs by \$2.35 billion and reduce the energy offset by \$2.11 billion, resulting in an LTRR of \$7.77 billion. See Company Response to Staff Interrogatory No. 1-50, Confidential Attachment 2.

⁸ Includes energy offsets from SMR units.

1 **Q. HOW HAS THE LTRR CHANGED FROM THE PRIOR YEAR'S FILING?**

2 **A.** The LTRR in this Petition is approximately \$2.5 billion less than the LTRR of \$10.5 billion
 3 filed in the Company's RPS petition last year.⁹ Increases in projected costs for solar assets
 4 in this year's Petition are offset by reductions in projected SMR costs and increases in the
 5 projected energy offset.

6 **Q. WHAT IS THE LONG-TERM REVENUE REQUIREMENT OF THE NEW**
 7 **PROJECTS PROPOSED FOR APPROVAL IN THE PETITION?**

8 **A.** The Company is proposing three new projects in the Petition: the Livingston wind
 9 purchase and sale agreement ("Livingston"), the HCE Collier Solar PPA ("Collier"), and
 10 the Company-owned Wythe battery energy storage system project ("Wythe BESS").¹⁰
 11 Staff witnesses Davis Little and David Dalton discuss the proposals in more detail. The
 12 LTRR impacts of the proposed projects are outlined in the chart below.¹¹

⁹ See *Petition of Appalachian Power Company, For Approval of its 2024 RPS Plan*, Case No. PUR-2024-00020, Doc. Con. Cen. No. 240640018, Ex. 20 (Prefiled Staff Testimony of Patrick W. Carr) at 2 (July 25, 2024).

¹⁰ See Petition, at 10-14.

¹¹ The LTRR includes projected impacts of generic resources as well as specifically identified resources, including the projects proposed in the Petition. If a project is not approved, it would not impact the LTRR, although removing a project from the RPS Plan may have other impacts on the LTRR.

Table 4: Proposed Projects LTRR

<u>Project</u>	<u>In-Service Date</u>	<u>Projected Life</u>	<u>LTRR (in millions)¹²</u>	<u>Energy Offset (in millions)</u>	<u>LTRR Net of Offsets (in millions)</u>
Livingston	2029	30 Years	\$883.8	\$519.4	\$364.4
Collier	2027	28 Years	\$12.7	\$9.1	\$3.6
Wythe BESS	2027	20 Years	\$138.0	\$27.1	\$110.9

1 **Q. HOW ARE FEDERAL TAX CREDITS TREATED IN THE LTRR?**

2 **A.** The LTRR incorporates production tax credits (“PTC”) for the Amherst, Grover Hill, and
3 Top Hat projects and investment tax credits (“ITC”) for the Livingston and Wythe BESS
4 projects. All projects include the transfer of some of the tax credits for cash. The benefits
5 of federal tax credits reduce the LTRR, and any changes to the federal tax credits or their
6 transferability could impact the LTRR. The following table reflects the LTRR impact of
7 federal tax credits on each of the owned facilities included in the LTRR.

¹² The data in this column comes from Schedules 1-6 of the direct testimony of Company witness Rebecca A. Schwarz (“Schwarz Direct”). Where appropriate, the weighted average cost of capital was updated to reflect Staff witness Elmes’s recommended Rate Year weighted average cost of capital.

Table 5: Tax Credit Revenue Requirement Impact

<u>Project</u>	<u>In-Service Date</u>	<u>ITC or PTC</u>	<u>Juris. LTRR Impact (in millions)¹³</u>
Amherst	2023	PTC	\$(1.2)
Grover Hill	2026	PTC	\$(52.0)
Top Hat	2025	PTC	\$(120.7)
Livingston	2027	ITC	\$(161.5)
Wythe BESS	2027	ITC	\$(31.9)
Total			\$(367.3)

Note that PPAs often benefit from federal tax credits that flow through to APCo's customers as lower contracted prices, and any changes to federal tax credits could result in increased costs for future PPAs.

Bill Impact Analysis

Q. WHAT IS THE ESTIMATED BILL IMPACT OF THE RPS PLAN?

A. The Company's Petition presents a year-by-year estimated bill impact analysis of the RPS Plan through 2054.¹⁶ The bill impact analysis uses 2024 actual bills as a baseline, then

¹³ The Amherst, Grover Hill, and Top Hat LTRR impacts were calculated using data provided in Schedule 1, ES Schedule 2, and ES Schedule 3 of the direct testimony of Company witness Jaclyn N. Cost. The Livingston and Wythe BESS LTRR impacts were calculated using data provided in the Company's response to Staff Interrogatory No. 1-60, multiplied by their 2024 jurisdictional allocation factors as provided in Schwarz Direct, ES Schedules 5 and 6.

¹⁶ See Petition, Attachment 1 at 59.

adds the projected bill impacts of RPS resources, SMRs, and their energy offsets.¹⁷ The estimated monthly bills incorporating the LTRR for select years are presented below.

Table 6: RPS Plan Bill Impacts

<u>Customer Class</u>	<u>2024</u>	<u>2030</u>	<u>2040</u>	<u>2054</u>	<u>Cumulative % Increase</u>
Residential (1,000 kWh)	\$173.95	\$181.78	\$217.64	\$326.54	87.7%
Small General Service (4,000 kWh)	\$589.80	\$612.16	\$693.72	\$946.94	60.6%
General Service (500 KW, 150,000 kWh)	\$21,426	\$22,430	\$25,505	\$35,248	64.5%
Large Power Service (1 MW, 400,000 kWh)	\$48,192	\$50,833	\$56,417	\$75,101	55.8%

Q. HOW ARE COSTS ALLOCATED IN THE LTRR BILL IMPACT ANALYSIS?

A. Costs and benefits of the RPS Plan are allocated among the RPS RACs in the same manner as approved in the Company's 2022 cost allocation proceeding.¹⁸ RAC revenue requirements are allocated among the customer classes based on demand and energy class allocators from the Company's 2024 biennial review.¹⁹ Year-end demonstrative bills for each customer class are then scaled up based on the incremental percentage increase in that class's revenue.²⁰ Bill impacts are not adjusted for any projected changes in revenue or class allocations.

¹⁷ Other rate components are held constant at the 2024 baseline for the purpose of this analysis. This is consistent with bill impact presentations in previous APCo RPS Plan cases.

¹⁸ *Filing of Appalachian Power Company, For consideration of the appropriate framework for cost recovery, the allocation of costs net of benefits pursuant to Code § 56-585.5 F, and class and jurisdictional cost allocation*, Case No. PUR-2022-00166, 2023 S.C.C. Ann. Rept. 266, Final Order (Sept. 15, 2023).

¹⁹ See Petition, Attachment 1 at 58; *Application of Appalachian Power Company, For a 2024 biennial review of its base rates and conditions pursuant to § 56-585.8 of the Code of Virginia*, Case No. PUR-2024-00024, 2024 S.C.C. Ann. Rept. 306, Final Order (Nov. 20, 2024).

²⁰ For example, if the 2025 annual RPS revenue requirement is 3% of 2024 revenues for a class, then presumably that class's typical bill will increase by 3%.

Conclusion

Q. PLEASE SUMMARIZE YOUR FINDINGS.

A. Staff makes the following conclusions and recommendations for the Commission's consideration:

1) Staff recommends the following revenue requirements for each RAC for the November 1, 2024 through October 31, 2025 rate year:

Table 7: RPS Revenue Requirements

<u>RAC</u>	<u>Revenue Requirement</u>
A.6 RPS RAC	\$20,471,196
A.5 RPS RAC	\$44,006,353
A.5 PCAP RAC	\$4,971,822
Rider NBC	<u>\$(24,293)</u>
Total	\$69,425,078

2) The estimated 30-year LTRR of the RPS Plan is \$8.0 billion, consisting of projected RPS costs of \$15.1 billion and projected energy benefits of \$7.1 billion. Based on revenue and customer class allocations as of the Company's 2024 biennial review, the LTRR results in estimated bills through 2054 as depicted below:

Table 8: RPS Bill Impacts

<u>Customer Class</u>	<u>2024</u>	<u>2030</u>	<u>2040</u>	<u>2054</u>	<u>Cumulative % Increase</u>
Residential	\$173.95	\$181.78	\$217.64	\$326.54	87.7%
Small General Service	\$589.80	\$612.16	\$693.72	\$946.94	60.6%
General Service	\$21,426	\$22,430	\$25,505	\$35,248	64.5%
Large Power Service	\$48,192	\$50,833	\$56,417	\$75,101	55.8%

1 **Q.** **DOES THIS CONCLUDE YOUR TESTIMONY?**

2 **A.** Yes, it does.

Appalachian Power Company
Case No. PUR-2025-00049

Welsh Statements

Statement	
No.	Description
I	RPS RAC Revenue Requirement Summary
II	Actual Cost True-Up Revenue Requirement
III	Bridge Period Revenue Requirement
IV	Projected Period Revenue Requirement

Exhibit No. _____

Witness: Welsh

Statement I

Appalachian Power Company
Case No. PUR-2025-00049

RPS RAC Revenue Requirement Summary

Line No.	Description	Staff Revenue Requirement	Company Revenue Requirement	Difference
1	A.6 RPS RAC	20,471,196	19,960,471	510,725
2	A.5 RPS RAC	44,006,353	44,002,960	3,393
3	A.5 PCAP RAC	4,971,822	4,969,660	2,162
4	Total RPS RAC Revenue Requirement	69,449,371	68,933,091	516,280
5	Rider NBC	(24,293)	(24,130)	(162)
6	Total	69,425,078	68,908,961	516,117

Exhibit No. _____

Witness: Welsh

Statement II

Appalachian Power Company
Case No. PUR-2025-00049

Actual Cost True-Up Revenue Requirement

Line No.	Description	PCAP	A5 RPS	A6 RPS	NBC
1	Dec 31, 2023 Under/(Over) Recovery Balance	(382,081)	7,848,211	(230,338)	-
2	Leatherwood PPA	169,755	374,496		
3	Wytheville PPA	153,149	325,687		
4	Depot PPA	159,843	135,442		
5	Wind PPAs	1,533,282	11,538,300		
6	PPA RFP Costs	273,429			
7	Amhert Cost of Service		114,156	488,116	
8	Bedington/Firefly Abandonment Costs			751,255	
9	REC Purchases		4,332,651		
10	WWS Premium		(2,286,346)		
11	NBC Costs Net of Benefits				(5,677)
12	Capacity Sales	(2,493)			
13	Rider Surcharge Revenue	(1,730,405)	(15,216,556)	(400,218)	7,253
14	Jan. 31, 2025 Under/(Over) Recovery Balance	174,480	7,166,041	608,816	1,576

Appalachian Power Company
Case No. PUR-2025-00049A.6 RPS RAC Actual Cost Factor
Amherst Cost of Service

Line No.	Description	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Total
1	Utility Plant in Service	11,676,704	11,653,783	11,974,515	11,977,451	11,978,216	11,978,726	11,978,893	11,979,101	12,022,310	12,022,493	12,022,698	12,022,977	12,616,765	
2	Accumulated Depreciation	(83,285)	(111,060)	(139,516)	(167,978)	(196,443)	(224,908)	(253,375)	(281,841)	(310,411)	(338,981)	(367,551)	(396,122)	(426,109)	
3	Net ARO Asset	(68,163)	(68,000)	(67,837)	(67,674)	(67,511)	(68,653)	(68,653)	(68,653)	(68,653)	(68,653)	(68,653)	(68,653)	(68,653)	
4	ADIT	(89,215)	(98,106)	(107,261)	(116,258)	(125,254)	(134,250)	(143,247)	(152,243)	(161,325)	(170,386)	(179,447)	(188,510)	(196,964)	
5	Net Rate Base	11,436,041	11,376,617	11,659,902	11,625,541	11,589,008	11,550,915	11,513,618	11,476,364	11,481,921	11,444,473	11,407,047	11,369,692	11,925,040	
6	Pre-Tax WACC	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7290%	0.7336%	0.7429%	0.7429%	
7	Return on Rate Base	83,368	82,935	85,000	84,749	84,483	84,205	83,933	83,662	83,702	83,429	83,687	84,469	88,595	
8	Depreciation Expense	27,829	27,774	28,456	28,463	28,464	28,466	28,466	28,467	28,570	28,570	28,570	28,571	29,986	
9	Accretion Expense - ARO	-	-	372	374	376	378	380	382	382	386	388	390	392	
10	Operation & Maintenance Expense	16,329	7,853	(7,429)	(3,323)	5,267	3,952	757	8,223	15,862	8,942	38,319	4,383	16,765	
11	PTCs with Tax Gross up	(25,250)	(42,520)	(31,425)	(35,867)	(11,939)	(30,641)	10,480	382,371	(478,270)	(16,278)	21,934	(14,916)	(20,999)	
12	Total O&M Expense	18,907	(6,893)	(10,027)	(10,353)	22,167	2,154	40,083	419,442	(433,457)	21,620	89,211	18,427	26,144	
13	Total Amherst Revenue Requirement	102,275	76,041	74,973	74,396	106,650	86,360	124,016	503,104	(349,755)	105,049	172,898	102,897	114,739	
14	A6 Value Stream %	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	86.64%	53.53%	53.53%	
15	A6 Revenue Requirement	88,609	65,880	64,955	64,455	92,399	74,820	107,444	435,876	(303,018)	91,012	149,794	55,084	61,424	
16	Jurisdictional Factor	46.59%	46.64%	46.71%	46.81%	46.83%	46.69%	45.20%	46.68%	46.72%	46.65%	46.73%	46.71%	46.77%	
17	Juris. A6 Revenue Requirement	41,285	30,726	30,338	30,172	43,269	34,932	48,563	203,475	(141,557)	42,453	70,003	25,728	28,730	488,116
18	A5 REC Value Stream %	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	13.36%	46.47%	46.47%	
19	A5 REC Revenue Requirement	13,667	10,161	10,018	9,941	14,251	11,540	16,572	67,228	(46,737)	14,037	23,104	47,813	53,316	
20	Jurisdictional Factor	46.59%	46.64%	46.71%	46.81%	46.83%	46.69%	45.20%	46.68%	46.72%	46.65%	46.73%	46.71%	46.77%	
21	Juris. A5 REC Revenue Requirement	6,368	4,739	4,679	4,654	6,674	5,388	7,490	31,383	(21,833)	6,548	10,797	22,332	24,938	114,156

Exhibit No. _____

Witness: Welsh

Statement III

Appalachian Power Company
Case No. PUR-2025-00049

Bridge Period Revenue Requirement

Line No.	Description	A6 RPS	A5 RPS	PCAP	Total
1	In-Service Solar PPA	-	1,936,257	655,115	2,591,372
2	Projected Solar PPA	-	2,188,172	758,460	2,946,632
3	Amherst	290,038	198,078	-	488,116
4	Grover Hill	960,191	504,172	-	1,464,363
5	Top Hat	2,440,288	5,378,345	-	7,818,633
6	Wind REPAs	-	9,347,761	1,220,555	10,568,316
7	WWS Premium	-	(2,286,346)	-	(2,286,346)
8	Rider Surcharge Revenue	(400,218)	(15,216,556)	(1,730,405)	(17,347,178)
9	Total Bridge Period Revenue Requirement	3,290,300	2,049,883	903,725	6,243,907

Exhibit No. _____

Witness: Welsh

Statement IV

Appalachian Power Company
Case No. PUR-2025-00049

Projected Period Revenue Requirement

Line No.	Description	A6 RPS	A5 RPS	PCAP	NBC	Total
1	In-Service Solar PPA	-	1,229,105	428,050	-	1,657,155
2	Projected Solar PPA	-	2,485,416	773,122	-	3,258,538
3	Amherst	208,687	185,194	-	-	393,881
4	Grover Hill	11,381,291	6,056,138	-	-	17,437,428
5	Top Hat	4,982,102	12,972,141	-	-	17,954,243
6	Wind REPAs	-	13,972,910	2,692,445	-	16,665,354
7	WWS Premium	-	(2,110,473)	-	-	(2,110,473)
8	NBC Energy Costs Net of Benefits				(25,869)	(25,869)
9	Revenue Requirement	16,572,080	34,790,430	3,893,617	(25,869)	55,230,258

Exhibit No. _____

Witness: Welsh

Statement IV

**Appalachian Power Company
Case No. PUR-2025-00049**

**A.6 RPS RAC Revenue Requirement
Amherst Cost of Service**

Line No.	Description	2026	2027	Pro-Rated Amount
1	Juris. Average Rate Base	4,425,298	4,160,925	
2	Weighted Average Cost of Capital	7.351%	7.351%	
3	Return on Rate Base	325,301	305,867	
4	O&M Expense	49,140	50,108	
5	Depreciation	161,526	161,526	
6	ARO Depreciation	2,306	2,306	
7	Production Tax Credit	(146,631)	(146,776)	
8	Income Tax Expense	(84,813)	(83,778)	
9	Revenue Requirement	306,829	289,254	
10	Gross-Up Factor	1.32	1.32	
11	Revenue Requirement	403,511	380,398	
12	Pro-Ration	0.583	0.417	
13	Rate Year Revenue Requirement	235,382	158,499	393,881
14	REC Extract Value	107,631	77,563	185,194
15	A6 Revenue Requirement			208,687

Exhibit No. _____

Witness: Welsh

Statement IV

**Appalachian Power Company
Case No. PUR-2025-00049**

**A.6 RPS RAC Revenue Requirement
Grover Hill Cost of Service**

Line No.	Description	2026	2027	Pro-Rated Amount
1	Juris. Average Rate Base	158,147,776	139,943,590	
2	Weighted Average Cost of Capital	7.351%	7.351%	
3	Return on Rate Base	11,625,359	10,287,179	
4	O&M Expense	1,994,601	2,605,057	
5	Depreciation	5,524,041	5,524,455	
6	ARO Depreciation	42,035	42,035	
7	Accretion Expense	75,158	79,637	
8	Production Tax Credit	(2,598,951)	(2,598,951)	
9	Income Tax Expense	(3,300,250)	(3,808,607)	
10	Subtotal	13,361,993	12,130,804	
11	Gross-Up Factor	1.32	1.32	
12	Revenue Requirement	17,572,356	15,953,221	
13	Pro-Ration	0.917	0.083	
14	Rate Year Revenue Requirement	16,107,993	1,329,435	17,437,428
15	REC Extract Value	5,545,891	510,246	6,056,138
16	A6 Revenue Requirement			11,381,291

Exhibit No. _____

Witness: Welsh

Statement IV

**Appalachian Power Company
Case No. PUR-2025-00049**

**A.6 RPS RAC Revenue Requirement
Top Hat Cost of Service**

Line No.	Description	2026	2027	Pro-Rated Amount
1	Juris. Average Rate Base	249,670,417	224,960,464	
2	Weighted Average Cost of Capital	7.351%	7.351%	
3	Return on Rate Base	18,353,140	16,536,725	
4	O&M Expense	3,720,080	4,975,104	
5	Depreciation	8,512,428	8,512,428	
6	ARO Depreciation	96,265	96,265	
7	Accretion Expense	172,121	182,380	
8	Production Tax Credit	(11,283,839)	(11,328,987)	
9	Income Tax Expense	(5,301,531)	(6,184,334)	
10	Subtotal	14,268,664	12,789,579	
11	Gross-Up Factor	1.32	1.32	
12	Revenue Requirement	18,764,720	16,819,576	
13	Pro-Ration	0.583	0.417	
14	Rate Year Revenue Requirement	10,946,087	7,008,156	17,954,243
15	REC Extract Value	7,529,683	5,442,458	12,972,141
16	A6 Revenue Requirement			4,982,102

Exhibit No. _____

Witness: Welsh

Statement IV

Appalachian Power Company**Case No. PUR-2025-00049****Rider NBC Rate Year Revenue Requirement**

Line No.	Description	Energy Cost	Energy Benefit	Cost Net of Benefits
1	Rate Year Energy Costs/Benefits	6,782,910	(14,164,070)	(7,381,161)
2	NBC Customer %	0.350%	0.350%	0.350%
3	Rate Year NBC Costs Net of Benefits	23,772	(49,641)	(25,869)

Appalachian Power Company
Case No. PUR-2025-00049

Appendix A: Select Interrogatories

Int. No.	Description
Staff 1-60	Federal Tax Credits, Wythe and Livingston
Staff 3-107	LTRR Inputs (Voluminous Confidential Attachments Excluded)
Staff 6-156	Glade-Whitetop LTRR Exclusion

**COMMONWEALTH OF VIRGINIA
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SCC CASE NO. PUR-2025-00049
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of Documents by the STAFF OF THE STATE CORPORATION COMMISSION
Staff Set 1
To Appalachian Power Company**

Interrogatory Staff 1-60:

Please refer to the direct testimony of Company witness Schwarz (“Schwarz Direct”) at Schedule 2. Provide the total dollar amount of the federal tax credits that are factored into the Company cost-of-service figures in Schedule 2. Please also provide a narrative explaining if the Company expects the federal tax credits from the Inflation Reduction Act (“IRA”) to remain available.

Response Staff 1-60:

The estimated net ITC credits for the Wythe and Livingston projects are \$60,533,888 and \$345,353,673, respectively.

Under current law, the Company expects the projects to qualify for tax credits available from the Inflation Reduction Act. The Company cannot speculate on the impact of future legislation.

The foregoing response is made by Rebecca A. Schwarz, Dir Reg Pricing & Analysis, on behalf of Appalachian Power Company.

**COMMONWEALTH OF VIRGINIA
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Staff Set 3
To Appalachian Power Company**

Interrogatory Staff 3-107:

Please refer to the Company's response to Staff Set 1-50, Attachment 2. Please provide all workpapers, calculations, and assumptions used to develop the following elements of the attachment:

- (a): Solar variable O&M expense
- (b): Wind variable O&M expense
- (c): Storage variable O&M expense
- (d): SMR variable O&M expense
- (e): Solar fixed O&M expense
- (f): Wind fixed O&M expense
- (g): Storage fixed O&M expense
- (h): SMR fixed O&M expense
- (i): Solar annualized build cost
- (j): Storage annualized build cost
- (k): SMR annualized build cost
- (l): Solar ongoing capital cost recovery
- (m): Wind ongoing capital cost recovery
- (n): Storage ongoing capital cost recovery
- (o): EE/DR/VVO fixed O&M expense
- (p): EE/DR/VVO annualized build cost
- (q): REC annualized build cost
- (r): Base Ref Pool Revenues

Response Staff 3-107:

This response contains confidential information that is provided pursuant to the Hearing Examiner's June 10, 2025 Protective Ruling Including Additional Protective Treatment for Contracts & Prices Information.

For part a – h: O&M costs are based on Year 1, 2024 USD. These costs include labor, material, contract services for technical O&M activities, and the performance of battery augmentation or fuel cell stack replacements as applicable. Non-technical O&M components are not included, such as land lease, property taxes, insurance costs, non-technical administrative overhead, etc.

For part i – n: The annualized build cost is an output of the PLEXOS model based on the installed cost input and the levelized carrying charge rate (LCCR) for each individual resource type. The installed costs per resource type were include in Staff 1-48 Attachment 1. The LCCR for each individual resource type is listed below:

- Solar: 8.17%
- Wind: 8.52%
- Storage: 10.39%
- SMR: 7.87%

For o – p:

- For EE, please see the Company's response to Staff 1-26 and specifically Staff 1-50 CONFIDENTIAL Attachment 3.
- For DR, please see Staff 3-107 Attachment 1.
- For VVO, please see Staff 3-107 CONFIDENTIAL Attachment 2.

For q: N/A. See Table 12 of the RPS Plan at 36: New Resource Modeling Limitation Assumptions, REC resources were modeled as single year purchases. The REC costs were developed by converting the Company's \$/MW-day REC price curves, as found on Staff 3-107 CONFIDENTIAL Attachment 3, into \$/kW-yr and multiplying the selected REC resource type block size in MW by the calculated \$/kW-yr REC price.

For r: Annual Pool Revenues were derived by multiplying the annual generation by an annual average market price.

YEARLY PARTICIPANTS AND COSTS			
	Residential / Small Commercial - "1 Block"		
Participants	1,000	1,600	800
Total Demand Savings (kW)	2,000	2,024.64	1,012
Annual Energy (kWh)	13,000	24,577.18	12,289

Sector	Participants	Demand Savings (kW)	Energy Savings (kWh)	Installation Cost	Annual Cost	Total First Year Cost	Service Life (Years)
Residential / Commercial	1,000	2,000	13,000	\$ 55,000	\$ 478,000	\$ 533,000	7

Costs				
One-time	55,000	109,000	\$	54,500
Utility Evaluation	15,000	29000		14,500
Initial Incentive	40,000	\$ 80,000		40,000
Promotion	-			-
On-Going (yearly for 7 years)	478,000	955,000	\$	477,500
On-going Incentive	168,000	\$ 335,000		167,500
Administrative	67,000	\$ 133,000		66,500
Contractor Administration	244,000	\$ 487,000		243,500
Total Costs	\$ 533,000	\$ 1,064,000	\$	532,000

MODELING DETAILS
A. Assign as Going-In resource through 2026, optimize selection beginning in 2027 to align with current APCO DSM plan.
B. Only one resource comprising both residential and commercial.
C. Service life of residential and commercial resources will be 7 years.
D. Up to one (1) units of each block will be available each year beginning in 2027.
E. Costs are in 2024 \$.

											2022	2023	2024	2025	2026	
Program	Sub Program	Measure Code	Measure Name	Customer Class	Load Shape	Annual kWh	Annual kW	Incremental Cost	Incentive	EUL	Quantity					NTGR
											Year 1	Year 2	Year 3	Year 4	Year 5	
Bring Your	DR	BYOT-1	BYOT_De	Residential	APV_RES	15.36	1.265	\$ -	\$ 25.00	1.00	7,000	8,600	10,200	11,800	13,400	100%
Bring Your	DR	BYOT-2	BYOT_De	Residential	APV_RES	15.36	1.265	\$ -	\$ 50.00	1.00	1,600	1,600	1,600	1,600	1,600	100%
						15.361	1.265		28.39		8,600	10,200	11,800	13,400	15,000	11,800

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Staff Set 6
To Appalachian Power Company**

Interrogatory Staff 6-156:

Refer to Section 8.1 of the RPS Plan, Table 27. Please indicate whether the Glade--Whitetop BESS project was included in the RPS Plan long-term revenue requirement calculation.

Response Staff 6-156:

No. This project was not included in the lifetime gross revenue requirement.

The foregoing response is made by Ismael Martinez, Resource Planning Lead, and Jaclyn N. Cost, Regulatory Consultant Staff, on behalf of Appalachian Power Company.