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**BY HAND DELIVERY**

Ingrid Ferrell, Executive Secretary  
West Virginia Public Service Commission  
201 Brooks Street  
Charleston, WV 25301

14-0509-E-P  
Re: ~~General Order No. 184.25~~

Dear Ms. Ferrell:

I am filing in the above-referenced docket, on behalf of Appalachian Power Company ("APCo") and Wheeling Power Company ("WPCo"), pursuant to Rule 8.4 of the Commission's Rules Governing Alternative and Renewable Energy Portfolio Standard, the original and twelve (12) copies of the 2014 Annual Progress Report of APCo and WPCo to demonstrate compliance with the Commission's Alternative and Renewable Energy Portfolio Standard.

If there are any questions about the report, please feel free to direct them to the undersigned.

Very truly yours,

William C. Porth  
(W.Va. State Bar #2943)

Counsel for Appalachian Power Company  
and Wheeling Power Company

WCP:ss  
Enclosures

**West Virginia Alternative and Renewable Energy Standard**  
**2014 Annual Progress Report for Appalachian Power Company (APCo)**  
**&**  
**Wheeling Power Company (WPCo)**

The attached exhibits have been prepared pursuant to Rule 8 of the Commission Rules Governing Alternative and Renewable Energy Portfolio Standard, 150 C.S.R 34 (Portfolio Standard Rules). The requirements of a portfolio standard annual progress report and a description of the exhibits meeting those requirements are detailed below. The responses in this report include both APCo and WPCo data unless otherwise noted.

*8.4. By March 31 each year following the Commission's approval of an electric utility's compliance plan, the electric utility shall submit to the Commission an annual progress report, in filing formats to be determined by the Commission, demonstrating compliance with the requirements of the Portfolio Standard. The progress report shall include:*

*8.4 a. The electric utility's sales to retail customers in West Virginia as recorded at the customer's meter in the previous two calendar years, by year, in total number of megawatthours;*

**2012 - 16,761,673 MWh**  
**2013 - 16,890,005 MWh**

**The requested information is also shown in Exhibit 1 (Column A).**

*8.4.b. The total amount of energy the electric utility has generated, purchased or procured from alternative or renewable energy resources as of December 31 of the previous calendar year;*

**2013 - 19,320,982 MWh**

**A detailed breakdown of the requested information is shown in Exhibit 1 (Columns D through H).**

*8.4.b.l. The portions, stated separately, of the total amount of energy required in Rule 8.4.b corresponding to energy generated, purchased or procured from the combustion of natural gas and generated from supercritical technology, if any;*

**2013 - 17,345,047 MWh**

**A detailed breakdown of the requested information is shown in Exhibit 1 (Columns G and H).**

8.4.b.2. *The electric utility's sales to retail customers in West Virginia as recorded at the customer's meter in the two previous calendar years, by year, corresponding to voluntary purchases by retail customers of energy from renewable sources, if any;*

**Please see the following table for the voluntary purchases by retail customers of energy from renewable sources.**

APCO WV Green Pricing Units Voluntary Purchases	
Year	kWh
2012	19,800
2013	5,400

8.4.c. *The balance of the credits from alternative and renewable energy resource facilities the electric utility has purchased or procured as of December 31 of the previous calendar year;*

**As of December 31, 2013 no credits from alternative and renewable energy resource facilities have been purchased or procured by the Company. The requested information is also shown in Exhibit 1 (Column J).**

8.4.d. *The balance of the credits the utility has been awarded or purchased from energy efficiency or demand-side energy initiative projects or greenhouse gas emission reduction or offset projects as of December 31 of the previous calendar year:*

**As of December 31, 2013, no greenhouse gas emission reduction or offset projects have been awarded or purchased by the Company. On March 5, 2013, the Commission certified four EE/DR programs as qualified energy resources to generate credits under the Commission Rules. The Order certified the Residential Low Income Weatherization Program pending a filing of further data (the evaluation, measurement and verification protocols) within one year from the entry of the March 5 Order. The Company made this filing on June 4, 2013 in Case No. 12-0596-E-P.**

**In 2013, 50,001 credits were awarded; refer to Exhibit 1 (Column I).**

8.4.d.1. *The electric utility's sales to retail customers in West Virginia as recorded at the customer's meter in the two previous years, by year, corresponding to voluntary purchases by retail customers of offsets or greenhouse gas emission reductions offsetting retail power use, if any;*

**The Company has not recorded sales to retail customers in West Virginia corresponding to voluntary purchases by retail customers of offsets or greenhouse gas emission reductions offsetting retail power use.**

*8.4.e. A comparison of the budgeted and actual costs as compared to the estimated cost of the portfolio standard compliance plan, including the information on credit transactions required under Rule 6.1.a, subject to the same public disclosure provisions in Rule 6.1.b.;*

**Please see Exhibit 2 for the requested information.**

**In addition to Exhibit 2, the Commission requested additional information in its order dated July 22, 2013, in Case No. 13-0454-E-P, which contained the following directive:**

*“the Commission will require that in the future AEP file an update showing actual data as compared to the estimates in the original compliance plan . . . We direct AEP to provide updated comparative data in future annual progress reports. This update should show substitute actual data for the original estimates as well as the projection for the remaining years in the compliance plan.”*

**Please see Exhibit 3 for the information requested in the July 22, 2013 Order.**

*8.4.f. An accounting issued by PJM-EIS that shows the number of alternative and renewable energy resource credits purchased and/or held by the electric utility as of December 31 of the previous calendar year;*

**PJM EIS does not provide accounting services to its subscribers and does not report subscriber information publicly. PJM EIS administers the generation attributes tracking system (or “GATS”) which tracks a subscriber’s REC inventory by certificate.**

**Please see Exhibit 1 for the number of alternative and renewable energy resource credits purchased and/or held by the electric utility as of December 31 of the previous calendar year. As APCo is a multi-jurisdictional utility, the total credits purchased and/or held as shown in Exhibit 1 is the WV jurisdictional quantity.**

*8.4.g. An accounting issued by PJM-EIS that shows the portions, reported separately, of alternative and renewable energy resource credits retired to meet the Portfolio Standard of the previous calendar year corresponding to energy generated from the combustion of natural gas and energy generated from supercritical technology, if any;*

**See the Company’s response to part 8.4.f. In addition, APCo has not retired any RECs to meet the Portfolio Standard of the previous calendar year as of December 31, 2013.**

*8.4.h. The vintage year and serial number of the greenhouse gas emission reductions or offsets awarded or purchased and attestation by the electric utility that all greenhouse gas emission reductions or offsets used for compliance under this rule were retired in the offset registry of the approved greenhouse gas program in which the reductions or offsets were registered for the purpose of this rule;*

**No greenhouse gas emission reductions or offsets have been awarded or purchased by the Company. No greenhouse gas emission reductions or offsets used for compliance under this rule have been retired.**

*8.4.i. For any credits awarded for emission reductions or offsets under Rule 5.4 in any previous year, an attestation that the offsets remain in compliance with the reversal rules of the greenhouse gas program where the reductions or offsets were registered;*

**See the Company's response to part 8.4.h.**

*8.4.j. A list of any requirements and a description of how the electric utility satisfied or will satisfy those requirements if an electric utility is subject to an alternative energy, advanced energy, renewable energy or similar energy portfolio standard in any other state,*

**APCo has a service territory that extends into both Virginia and West Virginia and as such is subject to the requirements of both states. Currently the state of Virginia has a voluntary renewable standards policy in which APCo is a participant, and the goals of that standard are as follows:**

- **RPS Goal I: In calendar year 2010, 4 percent of total electric energy sold in the base year.**
- **RPS Goal II: For calendar years 2011 through 2015, inclusive, an average of 4 percent of total electric energy sold in the base year, and in calendar year 2016, 7 percent of total electric energy sold in the base year.**
- **RPS Goal III: For calendar years 2017 through 2021, inclusive, an average of 7 percent of total electric energy sold in the base year, and in calendar year 2022, 12 percent of total electric energy sold in the base year.**
- **RPS Goal IV: For calendar years 2023 and 2024, inclusive, an average of 12 percent of total electric energy sold in the base year, and in calendar year 2025, 15 percent of total electric energy sold in the base year.**

**It remains APCo's intent at this time to continue to comply with renewable standards in Virginia and West Virginia.**

# **EXHIBIT 1**

APCo & WPCo West Virginia Alternative and Renewable Energy Portfolio Act  
 2014 Annual Progress Report

Exhibit 1

Year	WV REQUIREMENT			APCo & WPCo ALTERNATIVE ENERGY PLAN							WV Share of Total APCo & WPCo Sales (g)	WV CREDITS and CREDIT BANK BALANCE BY SOURCE											
	WV Retail Sales	Target %	Required Credits	APCo (Total Company) Generated MWh					EE/DR and Purchased Credits			WV Plan Credits By Source				Annual Credit Surplus/(Deficit) By Source (h)				Cumulative Credit Bank By Source (i)			
				Wind (a)	Hydro (b)	Pumped Storage (PS) Hydro (c)	Adv Coal Super Critical Tech. (d)	Natural Gas (e)	EE/DR (f)	Pur. Credits		L1	L2	L3	L4	M1	M2	M3	Total	N1	N2	N3	N4
(MWh)		Credits per MWh:	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)		Wind + Hydro + PS + EE/DR + Purchased	Adv Coal	Natural Gas	Total	Wind + Hydro + PS + EE/DR + Purchased	Adv Coal	Natural Gas		Wind + Hydro + PS + EE/DR + Purchased less Sales	Adv Coal	Natural Gas	Total
2011	16,988,721	0	0	195,776	0	0	0	0	0	0	0.4330	169,529	0	0	169,529	169,529	0	0	169,529	169,529	0	0	169,529
2012	16,761,673	0	0	919,515	442,399	357,271	14,245,280	32,687	0	0	0.4304	1,326,139	6,131,325	14,069	7,471,533	1,326,139	6,131,325	14,069	7,471,533	1,495,668	6,131,325	14,069	7,641,062
2013	16,890,005	0	0	886,312	705,537	384,086	15,021,183	2,323,864	50,001	0	0.4259	1,540,938	6,398,033	989,813	8,928,783	1,540,938	6,398,033	989,813	8,928,783	2,801,909	12,529,358	1,003,882	16,335,148

- Notes: (a) Includes January - December 2013 generation from Beech Ridge, Camp Grove, Fowler Ridge and Grand Ridge.  
 (b) WV Alternative Energy Resource (AER) Certification awarded on 3/8/2012. WV credits awarded starting on March 9, 2012.  
 (c) WV AER Certification awarded on 3/8/2012.  
 (d) WV AER Certification awarded on 3/8/2012. Facilities included in APCo's total 2013 supercritical generation are MT, AM1, AM2, and 1/3 of AM3. The total AM 3 2013 generation was 7,142,835 MWh.  
 (e) WV AER Certification for the Ceredo facility was awarded on 3/8/2012. APCo's Dresden facility was certified on March 5, 2013.  
 (f) WV AER Certification awarded on March 5, 2013 (Case No. 12-0596-E-P).  
 (g) APCo WV energy allocation factor for the 12-months ending December 31, 2013 is 0.425934.  
 (h) When calculating the annual credit surplus or deficit, at least 80% of the annual required credits must come from Wind/Hydro/Pumped Storage/EE sources (column L1). Advanced supercritical coal technology (column L2) and natural gas (column L3) credits may be used for no more than 20% (10% each) of the total annual credit requirement. Credits earned from supercritical coal technology and natural gas generation sources in excess of the 10% annual requirement are retained in the natural gas and supercritical coal credit banks respectively.  
 (i) Credits begin to accumulate upon Commission approval of the facility or program.

Calculations:

Column L1: Sum the results of steps 1, 2 and 3 below, then multiply the result by column K.

- Sum columns D and E, then multiply by 2 (2 credits per MWh)
- Multiply column F by 1 (1 credit per MWh)
- Sum columns I and J, then multiply by 1 (1 credit per MWh)

Column L2: Multiply column G by column K, then place the result in column L2

Column L3: Multiply column H by Column K, then place the result in column L3.

Columns M1, M2 and M3: In general, the annual surplus/deficit credit is calculated by subtracting the required credits (column C) from the plan credits (columns L1, L2 and L3). The allocations are made as described in note (h) above.

Columns N1, N2 and N3: The credit bank is calculated by adding this year's surplus/(deficit) (columns M1, M2 and M3) to the credit bank from the previous year (columns N1, N2 and N2), then subtracting credit sales.

## **EXHIBIT 2**



**APCo & WPCo West Virginia  
Alternative and Renewable Energy Portfolio Act  
2014 Annual Progress Report**

**Exhibit 2**

**Cost to Comply With the West Virginia Alternative and Renewable Energy  
Portfolio Act - 2013 Reconciliation**

All \$ in 1000's

	2013		
	Estimated (a)	Actual (b)	Difference
<b>APCo Total Company Purchase Wind</b>	\$74,793	\$61,552	(\$13,241)
WV Allocation Factor (c)	0.47	0.43	
<b>WV Share Purchase Wind</b>	\$35,153	\$26,493	(\$8,660)
<b>WV Credit Transactions</b>	\$0	\$0	\$0
<b>WV EE/DR Programs</b>	\$9,703	\$4,553	(\$5,150)
<b>Total (d)</b>	<b>\$44,855</b>	<b>\$31,046</b>	<b>(\$13,809)</b>

Notes:

- (a) Source: Exhibit 4 of APCo's 12/30/2010 Plan Filing (10-1914-E-CP).
- (b) Actual value of Purchase Wind costs represents actual contract costs for Jan-Dec 2013.
- (c) Estimated value was calculated in 10-1914-E-CP using a 47% WV Allocation Factor. The actual value was calculated using 42.59%, which is the energy allocation factor for 12 months ending 12/31/13.
- (d) May not sum to total due to rounding.

# **EXHIBIT 3**

**APCo & WPCo West Virginia Alternative and Renewable Energy Portfolio Act  
 2014 Annual Progress Report  
 Comparative Summary of 2010 Plan to Actuals + Updated 2013 Forecasts  
 (with respect to the new 2014 reporting requirement provided in the Commission's July 22, 2013 Order)**

**EXHIBIT 3**

WV REQUIREMENT				APCo & WPCo ALTERNATIVE ENERGY PLAN							WV CREDITS and CREDIT BANK BALANCE BY SOURCE										TOTAL CREDIT BANK COMPARISON	
				APCo (Total Company) Qualifying Generation					EE/DR and Purchased Credits		WV Share of Total APCo & WP Sales (a) (b)	WV Plan Credits By Source (a) (b)			Annual Credit Surplus/(Deficit) By Source (a) (b) (c)			Credit Bank By Source (a) (b)			Actual with Updated Forecast (a) (b)	Original 2010 Plan
Year	WV Retail Sales (a) (b)	Target %	Required Credits (a) (b)	Wind (a) (b)	Hydro (a) (b)	Pumped Storage (PS) Hydro (a) (b)	Adv. Coal Super. Critical Tech. (a) (b)	Natural Gas (a) (b)	EE/DR (a) (b)	Pur. Credits (a) (b)		K	L1	L2	L3	M1	M2	M3	N1	N2		
	(GWh)		(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)		Wind + Hydro + PS + EE/DR + Purchased (000)	Adv Coal (000)	Natural Gas (000)	Wind + Hydro + PS + EE/DR + Purchased (000)	Adv Coal (000)	Natural Gas (000)	Wind + Hydro + PS + EE/DR + Purchased less Sales (000)	Adv Coal (000)	Natural Gas (000)	Total Credit Bank (000)	2010 Plan Credit Bank (000)
			2 Credits per MWh	2 Credits per MWh	1 Credit per MWh	1 Credit per MWh	1 Credit per MWh	1 Credit per MWh	1 Credit per MWh	1 Credit per MWh												
2011	16,989	0	0	196	0	0	0	0	0	0	0.4330	170	0	0	170	0	0	170	0	0	170	2,005
2012	16,762	0	0	920	442	357	14,245	33	0	0	0.4304	1,326	6,131	14	1,326	6,131	14	1,496	6,131	14	7,641	4,204
2013	16,890	0	0	886	706	384	15,021	2,324	50	0	0.4259	1,541	6,398	990	1,541	6,398	990	2,802	12,529	1,004	16,335	6,464
2014	17,256	0	0	887	632	708	11,733	483	31	0	0.4259	1,609	4,998	206	1,609	4,998	206	4,411	17,527	1,210	23,148	8,775
2015	17,324	10	1,726	887	655	687	15,921	1,249	42	0	0.4259	1,824	6,781	532	244	6,609	359	4,655	24,136	1,569	30,360	9,838
2016	17,422	10	1,732	890	617	698	15,373	1,896	96	0	0.4259	1,622	6,548	807	236	6,375	634	4,890	30,510	2,203	37,604	11,159
2017	17,484	10	1,742	887	616	693	16,807	2,072	96	0	0.4259	1,617	7,159	883	223	6,984	708	5,113	37,495	2,912	45,520	12,616
2018	17,511	10	1,748	887	616	687	15,925	2,126	96	0	0.4259	1,614	6,783	905	216	6,608	731	5,329	44,103	3,643	53,075	13,999
2019	17,557	10	1,751	887	616	676	16,532	2,070	96	0	0.4259	1,609	7,041	882	208	6,866	706	5,538	50,970	4,349	60,856	18,316
2020	17,628	15	2,634	890	616	684	16,852	2,051	96	0	0.4259	1,615	7,178	874	(492)	6,914	610	5,046	57,884	4,959	67,889	21,803
2021	17,709	15	2,644	887	616	682	16,815	1,891	96	0	0.4259	1,612	7,162	805	(503)	6,898	541	4,543	64,782	5,500	74,825	25,268
2022	17,813	15	2,656	1,234	616	684	14,266	2,495	96	0	0.4259	1,908	6,076	1,063	(217)	5,811	797	4,326	70,592	6,297	81,215	28,711
2023	17,898	15	2,672	1,580	616	687	15,281	2,427	96	0	0.4259	2,204	6,509	1,034	67	6,242	766	4,392	76,834	7,064	88,290	32,135
2024	17,963	15	2,685	1,932	616	691	15,550	2,491	96	0	0.4259	2,505	6,623	1,061	358	6,355	792	4,750	83,189	7,856	95,795	35,541
2025	18,027	25	4,491	2,272	616	694	12,711	2,301	96	0	0.4259	2,797	5,414	980	(796)	4,965	531	3,955	88,153	8,387	100,495	37,434

(a) actual data are shown for years 2011, 2012 and 2013.

(b) Updated forecast data shown in years 2014-2025. Forecast was prepared in June 2013.

(c) 80% of the required annual credits are taken from Wind+Hydro+EE/DR+purchased categories and 20% are taken from Supercritical Coal (10%) and Natural Gas (10%) credit categories. Surplus annual supercritical technology and natural gas credits are retained in the respective credit banks.